DOCUMENT RESUME

ED 471 308 EA 032 076

AUTHOR	Norman, Jack
TITLE	Funding Our Future: An Adequacy Model for Wisconsin School Finance.
INSTITUTION	Institute for Wisconsin's Future, Milwaukee.
PUB DATE	2002-06-00
NOTE	105p.
AVAILABLE FROM	Institute for Wisconsin's Future, 1717 South 12th Street Suite 203, Milwaukee, WI 53204. Tel: 414-384-9094; Fax: 414-384-9098; e-mail: iwf@wisconsinsfuture.org. Web site: http://www.wisconsinsfuture.org/. For full text: http://www.wisconsinsfuture.org/reports/Adequacy_report6_02.pdf.
PUB TYPE	Reports - Evaluative (142)
EDRS PRICE	EDRS Price MF01/PC05 Plus Postage.
DESCRIPTORS	*Educational Equity (Finance); *Educational Finance; Educational Legislation; Elementary Secondary Education; *Equal Education; Expenditure per Student; *Finance Reform; Financial Needs; Fiscal Neutrality; *Models; State Aid
IDENTIFIERS	*Wisconsin

ABSTRACT

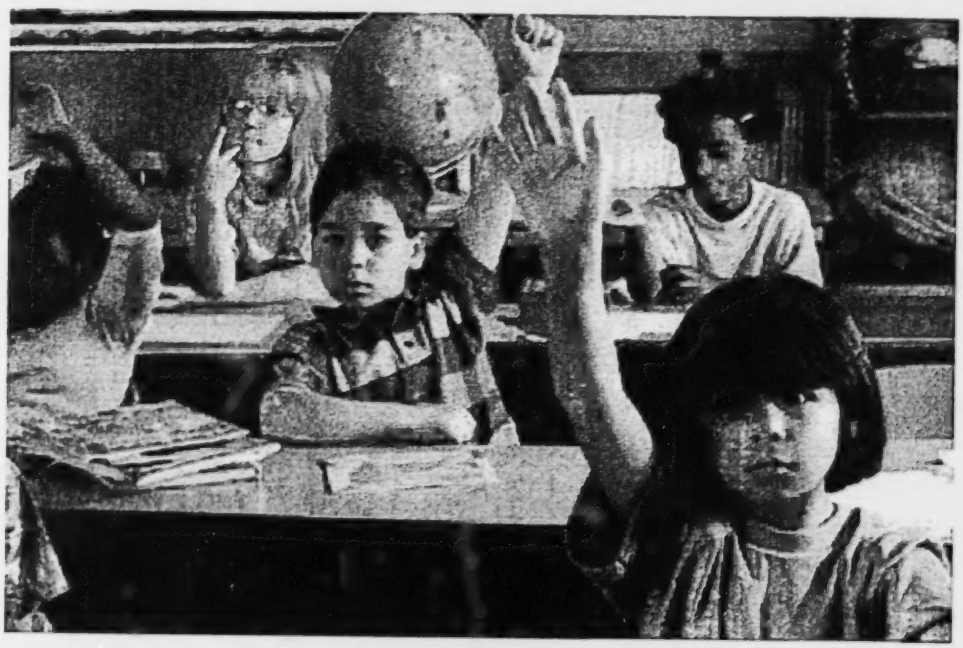
This report not only proposes a method to determine how much money is required to give Wisconsin's children an equal opportunity at educational proficiency, it also explores ways the money should be distributed. The first two chapters summarize the current situation regarding school finance and the history of the current fiscal crisis, paying special attention to the notion of school finance "adequacy" and outlining its emergence in the 1990s as the dominant theme in school-finance litigation nationwide. Chapter 3 explains the process used to determine what resources are needed to satisfy the educational standards issued in 1998 by the Wisconsin Department of Public Instruction and describes the use of a professional-judgment model to determine necessary resources. Chapter 4 lays out in detail the resources needed to reach educational adequacy, including core resources, resources for special cases, and resources that go beyond traditional public schools. Chapter 5 explores the costs of these resources and explains the methodology used to determine costs, as well as the concept of a foundation system for distributing funds. The last chapter discusses the feasibility of implementing adequacy in Wisconsin and details ways of reducing the initial costs of adequacy. Six appendices provide information on educational standards, comparative data, and other items of interest. (RJM)

Reproductions supplied by EDRS are the best that can be made
from the original document.

ED 471 308

Funding Our Future

An Adequacy Model for Wisconsin School Finance



Jack Norman, Ph.D.

INSTITUTE FOR WISCONSIN'S FUTURE
policy research in the public interest

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
✓ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

J. NORMAN

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

June 2002

EA 032 076

BEST COPY AVAILABLE

Funding Our Future

An Adequacy Model for Wisconsin School Finance

Jack Norman, Ph.D.

June 2002

Acknowledgements

Significant analytic contributions to this document were made by Richard Rothstein and Thomas Moore. IWF is grateful to the scholars, educators, parents and school administrators who participated in the expert panels, responded to the survey, assisted in the initial focus group discussions and created the sense of urgency for this task by their active commitment to improving the financial structure of Wisconsin's K-12 public schools.

INSTITUTE FOR WISCONSIN'S FUTURE
poli y research in the public interest

TABLE OF CONTENTS

PREFACE i

INTRODUCTION iii

EXECUTIVE SUMMARY vii

CHAPTER ONE: WHERE WE ARE AND HOW WE GOT HERE 1

CHAPTER TWO: AN ADEQUACY SYSTEM OF SCHOOL FINANCE 9

CHAPTER THREE: THE PROCESS FOR DETERMINING ADEQUATE RESOURCES 15

CHAPTER FOUR: ADEQUATE RESOURCES TO MEET WISCONSIN STANDARDS 19

CHAPTER FIVE: COSTING OUT RESOURCE STANDARDS 35

CHAPTER SIX: IS ADEQUACY FEASIBLE? 57

CONCLUSION 65

APPENDICES

- Appendix One: Synopsis of Wisconsin Model Academic Standards 67
- Appendix Two: Academic Proficiency of Wisconsin Students 72
- Appendix Three: Defining a Thorough Education Infrastructure 74
- Appendix Four: Adequacy Model Development Participants 87
- Appendix Five: Adequacy Models for Elementary, Middle, and High Schools 90
- Appendix Six: School Finance and Adequacy Resource Information on the Internet 93

BIBLIOGRAPHY 95

"Unquestionably, the cost to fix the system is high. The cost of not fixing it will be much higher. Uneducated citizens will extract extremely high social costs in the future. As the mechanic on television says, 'You can pay me now or pay me later.' "

Wisconsin Supreme Court Justice William A. Bablitch (Vincent v. Voight, 2000)

PREFACE

Even in the difficult current fiscal situation – with recession and the post-September 11 environment forcing painful choices for Wisconsin state government – it is critical to hold to a long-term vision for real investment in the state's public school system. Even if in the short run not a single additional penny goes into Wisconsin schools, there must be in place a plan for the future, a school-finance system containing a long-term commitment to adequate funding for education. Both war and recession are temporary, and the economy moves in cycles. But the state's commitment to quality education for all children must be neither temporary nor cyclical. Our vision for tomorrow must not be obscured by today's financial problems.

BEST COPY AVAILABLE

INTRODUCTION

Wisconsin needs a new way to fund public schools.
Just one year ago, this was a minority point of view. Now, after an extended period of deepening fiscal crisis in public education, it is an idea much more widely embraced, especially by the state's political establishment.

This report outlines an entirely new way of looking at how to finance the state's more than 2,000 public elementary, middle, and high schools, with their nearly 900,000 students. It is what school-finance professionals call an **Adequacy Model**.

Most current discussion on school finance reform is motivated by politics, by taxes, and by the deteriorated condition of the state's balance sheet. Lost in the discussion are genuine educational needs. The Adequacy Model, by contrast, is guided by educational needs, rather than by taxes, politics, or the cyclical health of the state budget. It takes as a starting point something that should be common sense: that a system for funding public schools be based on educational goals and methods.

The core of this Adequacy analysis is found in a table at the end of Chapter Five, which details estimates of adequate funding for each of the 426 school districts in Wisconsin. The real meaning of this report, however, is found not in those numbers, but rather in the method used to determine them. More precisely, it is the very questions posed at the beginning of the exercise – not the final numerical result – that contain the real meaning of "Adequacy" for Wisconsin: What are the goals of education? What resources do schools need so that all students have a chance of achieving those educational goals? What staffing, what materials, what curricula, and what management structures are required to fulfill the state constitutional requirement that all students have an equal opportunity for a successful education? What level of funding is required to provide these resources?

If the cost of achieving educational standards is too expensive, then either the standards must be lowered or a long-term plan adopted for gradually obtaining the needed funds. What should not happen is continuing to rhetorically support artificially high standards, while providing inadequate funding with no road map for reaching adequate funding in the future.

The current school finance system dates to the early 1990s, when a Republican governor joined with Republican and Democratic legislative leaders to pass its three main elements, designed to restrict the growth of property taxes. Even though education is the largest user of state and local taxes, the system implemented then was little more than a series of political compromises. It was not a strategic approach to education and the long-term economic health of Wisconsin. The crowning piece of legislation – the state's so-called two-thirds funding commitment – was written behind closed doors, without any public hearing or review. That short-term political solution has lasted nearly a decade, and is now bursting with the pressure of years of simmering problems.

BEST COPY AVAILABLE

The current system sets school spending without regard to educational needs. That's because the revenue-limit system means next year's spending is based mostly on this year's, this year's on last year's, last year's on the year before that, all emerging from a convoluted thicket of formulas with 1993 as an arbitrary starting point.

An Adequacy Model of school finance is designed from the ground up to create real links among spending, educational goals, and the resources needed to attain those goals. An Adequacy Model bases funding on the expenses for facilities, staffing, materials, equipment, and strategies necessary to meet specific academic goals. By contrast, the current system, and most proposed reforms, base funding on available revenue, geographic accidents of property wealth, and mere historical precedent.

An Adequacy Model of funding does not override local control. This report uses a concrete set of resources as the basis for calculating costs. But it does not propose that schools be mandated to buy exactly those resources. Rather, local districts would receive state funds in the form of block grants, and would be free to use the funding as they see fit.

An Adequacy Model has built-in accountability, because it links funding to student performance. There is no statistically significant correlation between current per-pupil spending and student achievement, as measured on the state's standardized tests. There is, however, a statistically significant correlation between spending and achievement, when actual spending is adjusted by the Adequacy concepts developed here.

There is no doubt that improvement in performance is needed. Even though Wisconsin students have among the nation's better scores on the National Assessment of Education Progress tests – the nation's premier achievement scorecard – still less than one in three score as proficient or above. There are sizable achievement gaps for students from low-income families and students of color. [NAEP, 2002]

This is not the first time that an Adequacy Model has been proposed for Wisconsin. Allan Odden, a nationally distinguished school finance scholar at the University of Wisconsin-Madison, already made such a proposal more than a year ago. In October 2000, Odden made a presentation on "An Adequacy Approach to Wisconsin School Finance" to the Governor's Blue-Ribbon Commission on State-Local Partnerships for the 21st Century (commonly known as the Kettl Commission). Odden, a member of that commission, urged the group to recommend the state "adopt a school finance system that provides an adequate amount of money per pupil," one that would "teach students to high performance standards" and that "holds schools, teachers and students accountable for performance." [Odden, 2000]

The Kettl Commission failed to follow Odden's advice. This report, while differing in many of its details from Odden's approach, nevertheless follows in the spirit of his recommendation. Especially relevant is Odden's hope of converting Wisconsin's finance system from one hopelessly tangled in fiscal formulas to one intimately grounded in educational goals and practices. As Odden expressed it to the Kettl Commission, he sought to "reposition school finance from [the] technical arena of formulas to [the] supportive center of the education system." [Odden, 2000]

This report proposes a method to determine how much money it will take to give all Wisconsin children an equal opportunity at educational proficiency, and how that money should be distributed. It does not take up in detail the question of how the money should be raised.

Chapter One summarizes the current situation regarding school finance in Wisconsin, and the history of how we reached the current fiscal crisis. It explains in more detail how structural problems in the system stand in the way of educational success.

Chapter Two elaborates on the notion of school finance Adequacy, and chronicles its emergence in the 1990s as the dominant theme in school finance litigation nationwide. It explores the recent history of school-finance litigation and educational standards in Wisconsin.

Chapter Three explains the process used to determine what resources are needed to satisfy the educational standards issued in 1998 by the Wisconsin Department of Public Instruction. It explores the use of what school finance professionals call a professional judgment model to determine necessary resources.

Chapter Four lays out in detail the resources needed to reach educational Adequacy. Those include core resources, needed in all schools; resources for special cases; and resources that go beyond traditional public school institutions. Finally, the chapter suggests staffing requirements for model elementary, middle and high schools.

Chapter Five explores the cost of those resources. It explains the methodology used to determine costs and the concept of a foundation system for distributing funds. It specifies concrete dollar figures for an Adequacy system, and calculates the Adequacy funding levels for every school district in the state.

Chapter Six discusses the feasibility of implementing Adequacy in Wisconsin. It details ways of initially reducing the cost of Adequacy, how Adequacy contributes to accountability, why Adequacy does not infringe on local control, and how Adequacy might be funded.

There are six appendices:

- Appendix One summarizes the state Department of Public Instruction's educational standards.
- Appendix Two presents state and national data on what proportion of Wisconsin students are academically proficient.
- Appendix Three contains results the Institute for Wisconsin's Future (IWF) survey of principals and teachers.
- Appendix Four lists participants in IWF's Adequacy panels.
- Appendix Five summarizes panelists' final resource recommendations.
- Appendix Six lists Internet web links for further reading on Adequacy models of school finance.

EXECUTIVE SUMMARY

The need to reform Wisconsin's school funding system has emerged as a major issue for 2002 – an issue pushed by parents and educators, researched by policy groups, and discussed by interest groups across the state.

In 1998, the Institute for Wisconsin's Future – a non-profit policy research, education, and advocacy organization – launched an effort to develop an alternative funding structure for Wisconsin. The goal was a system based not on tax and budget politics but on the learning needs of Wisconsin's nearly 900,000 public school students. The Adequacy model resulting from this work links funding to educational goals and the resources required to meet those goals. An Adequacy model provides districts the funds they need to buy the resources required to meet ambitious student-achievement goals.

Wisconsin's current school system has evolved from thousands of tiny districts paid for and managed by relatively similar rural communities, to a condensed network of 426 districts with diverse populations, economies, and disparities in wealth and income. Over fifty years ago, a state aid program was created to help offset differences in property wealth that shaped school revenue streams. This aid, however, did not significantly lessen the major inequities in the local capacity to fund schools.

The increasing cost of schools over the past 15 years resulted in pressure for local property tax relief. The state legislature responded to this pressure by establishing a new system in the 1990s based on three components:

- Limits on annual growth in district revenues and spending, based on budgets from the 1992-'93 school year;
- Restrictions on teacher bargaining rights, resulting in a dampening of wage increases;
- An initial boost in state aid, to hold down local property taxes and give additional resources to districts with limited property wealth.

This nearly decade-old school finance system is in crisis. Educational costs have risen far faster than the permissible budget increases under the spending limits. Revenue is proportional to enrollment, which is dropping in over half of the state's districts. State and federal reimbursements for mandated programs to serve students with special needs are a dwindling fraction of actual expenses.

The accumulation of these financial constraints has led to staffing and program cutbacks. The restraint in teacher salary increases has caused wage levels to fall below regional and national averages, worsening the shortage of skilled, experienced personnel.

The current system is deficient not only in content but in form. The three-tiered aid structure is so convoluted that adjustments are almost impossible without causing unintended and problematic financial side effects. In the current structure, there is no relationship between funding levels and educational goals for children.

Wisconsin's funding issues mirror similar crises across the United States. Several decades ago, court challenges to unequal spending and tax levels originally sought "equity" in school finance systems. When that legal strategy failed to achieve its initial promise, however, a new approach to finance reform developed which demanded not equity but an "adequate" education for all children. At the same time, the national movement for educational standards generated criteria for defining what educational outcomes give meaning to the concept of educational Adequacy.

In Wisconsin, three equity challenges to the school finance system were brought unsuccessfully to the state Supreme Court in the past quarter-century. However, the Court's 2000 decision in the third case cited the growing Adequacy movement. For the first time, the Court asserted a sufficiency condition on state support for public education: "So long as the legislature is providing sufficient resources so that school districts offer students the equal opportunity for a sound basic education as required by the constitution, the state school finance system will pass constitutional muster." [Vincent v. Voight, 2000]

The state's Department of Public Instruction, the Legislature, the state Supreme Court, and individual school districts have all developed versions of educational standards. Under an Adequacy model, standards like these are the basis for developing a funding system. If students are to meet the standards, it is critical to determine the staffing, programs, equipment, and strategies necessary for schools to be effective. The resulting "basket of goods and services" must be priced to determine the level of funding needed to ensure that these resources are available to all schools.

The methodology for this Adequacy model was originally developed for use in Wyoming by recognized school finance scholars James Guthrie, of Vanderbilt University, and Richard Rothstein, of the Economic Policy Institute. Using the educational standards developed by the Wisconsin Department of Public Instruction, a panel of educational experts designed model schools and delineated the staffing, programs, and materials needed to operate these schools. A survey based on the resource standards outlined by the experts was sent to principals and teachers statewide. Survey results, along with information from a national research review, were brought to a second expert panel, which synthesized the findings and defined key staffing, programming, and material needs for adequate schools.

The resource standards established through this method are:

- Small schools: Elementary schools with a maximum of 350 students, middle schools with a maximum of 500, and high schools with a maximum of 800.
- Small classes: A maximum of 20 students in kindergarten through third grade (15 in high-poverty schools), 22 students in fourth and fifth grades, and 25 in sixth through twelfth grades.
- Broad curriculum: Art, music, foreign language at all grade levels, and advanced courses, including Advanced Placement, at all high schools.

BEST COPY AVAILABLE

- Well-trained and compensated staff: Staff development time averaging one period daily for each teacher and a staff position to coordinate staff development; an across-the-board wage increase of 5% for all teachers; and salary incentives to teach in high-poverty and rural schools.
- Full reimbursement for services for students with disabilities and students with limited-English proficiency.
- Special resources for low-income children: Tutoring and enrichment programs, summer school, and all-day four-year-old kindergarten.
- Staff support for increased parental involvement.
- Appropriate technology: Five computer terminals for every 20 students, regularly upgraded.

Also recommended, but not included in the pricing of this Adequacy model, are additional non-classroom services for children in poverty, including pre-kindergarten programs and school-based medical and dental health services.

How much would it cost to ensure every school could meet these Adequacy resource standards? IWF contracted with Rothstein to build a model usable for estimating the cost of these necessary resources. The resulting model includes adjustment for regional variations in wages, for variations in district structure (such as high school-only districts or districts only going through eighth grade), for rural schools, and for students from low-income households. Using the model, IWF calculated foundation funding levels for an Adequacy system. Under these funding proposals (which do not include capital costs for construction):

- School districts would receive $8,500 per student, before regional wage and district structure adjustments.
- Rural districts would receive an additional $700 per student.
- All districts would receive $3,200 for each low-income student eligible for free meals.
- Districts would be reimbursed fully for spending on special education programming and English for students from immigrant families, based on actual expenditures rather than a fixed per-student amount.
- Very small rural districts (with less than 1,000 students) would receive additional aid.
- And all districts would receive funds to help them immediately implement some recommendations.

These funding proposals, when adjusted for regional wage variations and applied to districts using data from the 2000-'01 school year, yield a statewide average per pupil expenditure of $11,121. By comparison, the actual statewide average that year was $8,241. (Both of these figures exclude capital costs.)

If implemented all at once, this would mean a significant increase in spending. This would involve obvious political and fiscal difficulties, which deserve comment. It is probable that the Adequacy structure will not be implemented within a single two-year state budget cycle. A viable fiscal plan will require a multi-year phase-in. In addition, schools need time to plan for and introduce reforms, to measure progress, and to learn from one another. An Adequacy structure can be implemented now, at a modest cost. Then, the fully funded model could be implemented over time, as resources become available.

CHAPTER ONE: WHERE WE ARE AND HOW WE GOT HERE

School Finance History

The notion that a democracy cannot afford ignorance and that America must educate all of its children is imbedded in our philosophy of government. Just as America's federal system recognized that education was a responsibility of the states, so states came to realize that this duty was owed to all children. Many states, including Wisconsin, articulated this concept in their constitutions in response to the "common school" movement of the mid-19th century, which argued that democracy would be best served by bringing together under one roof students from all classes and ethnic backgrounds. "Whether the language of a particular state constitution spoke of a 'thorough and efficient' education, an 'ample' education or a 'sound basic education,' the common theme...is to provide an opportunity for an adequate level of education to all students." [Rebell, 1999]

When Wisconsin became a state in 1848, a key provision of the constitution was the responsibility to establish schools "as nearly uniform as practicable." [Wisconsin Constitution, Article X, Section 3] Thousands of tiny community districts funded and managed schools in an overwhelmingly rural environment, supported by local property taxes. Over time, as commerce, manufacturing, and wealthier landowners concentrated in certain areas of the state, the disparity in property wealth resulted in some districts paying higher property taxes but generating insufficient revenues to support public schools. In 1949, the state adopted a system to address property-wealth differences among districts, which provided equalization aid to poor districts and flat grants to districts with greater property wealth.

However, even with this aid, the school-finance system became more inequitable as parts of the state saw agricultural and industrial concerns close or move, which reduced the value of property, forcing residents to pay higher taxes to maintain even minimal school spending. Meanwhile, the number of districts had shrunk, as communities consolidated school systems to save tax money and expand educational options. These measures could not compensate for differentials in taxable wealth, however, which caused significant per-pupil spending disparities.

In 1973, the Legislature attempted to pool state tax dollars through a complex system that included so-called "negative aids," which forced property-rich districts to share some of their property-tax revenues with property-poor districts. In 1976, the Wisconsin Supreme Court declared the negative-aid provision unconstitutional, in the case of *Buse v. Smith*. Over the next 15 years, the combined impact of severe recession in the early 1980s, increasing education costs, and cuts in business property taxes increased the property-tax burden on homeowners.

The outcry for tax relief led the Legislature to adopt two policies in 1993 to hold down increases in school spending. One was a revenue limit, which capped the growth of school district revenue collec-

tion (and thus spending) unless residents voted in a community referendum to override the cap. The revenue limits institutionalized the unequal per-pupil spending then in place and curtailed local school board authority to increase local tax rates to meet specific school district needs.

The second policy was to limit the growth of teacher wages and benefits through the Qualified Economic Offer (QEO) law, whereby district administrators were allowed to avoid both contract arbitration and teacher strikes if they offered teachers at least a 3.8% increase in the wage/benefit package.

As a final step toward providing property-tax relief, the Legislature and governor also agreed to increase the state's share of funding for public schools. Effective with the 1996-'97 school year, the state agreed to provide two-thirds of school costs. Until then, the state share had been approximately 50%. (For a review of these developments, along with year-by-year comparisons of state and local funding, see [Kava and Merrifield, 2001].) Actually, this two-thirds commitment falls short of providing two-thirds of total school spending, for two reasons. For one thing, it is two-thirds of combined state and local spending only, ignoring the federal contribution to public schools. For another, included in the state's share is $469 million in annual property tax relief – the School Levy Tax Credit – that goes to individual taxpayers rather than to schools. If federal funds were included, and the levy credit excluded, the state contribution would be much closer to about half of the real spending on schools.

This two-thirds plan was not a carefully designed, strategic approach to school finance. Rather, it was a quickly conceived political deal, taking advantage of a momentary surplus in state revenues. Republican Senator Mike Ellis was majority leader in the state Senate, and Democratic Assemblyman Walter Kunicki was majority leader in the state Assembly. "The situation came to a head in a storied conference committee standoff between Rep. Kunicki and Sen. Ellis, who eventually reached a compromise to use the surplus to freeze the school tax levy. They also agreed to put in place a plan that would require the state to pick up two-thirds of the costs of public education." [Talis, 2001]

It was not a compromise forged in the heat of public discussion. "That decision was made without a single public hearing," Talis noted. "And it cemented the revenue limits and the QEO in place." Political motivations, not educational needs, created the current school-finance system. "A brief examination of legislative history makes one point abundantly clear – the system was cobbled together for political reasons during a time of near property taxpayer revolt."

The two-thirds aid package was designed primarily to reduce local property taxes. The amount of state aid to each district varies depending on the district's level of property wealth and spending. In property-poor districts, the state provides a larger percentage of school revenues, to compensate for the smaller amount available from property taxes. In districts with more property wealth, the state covers a smaller portion of school costs.

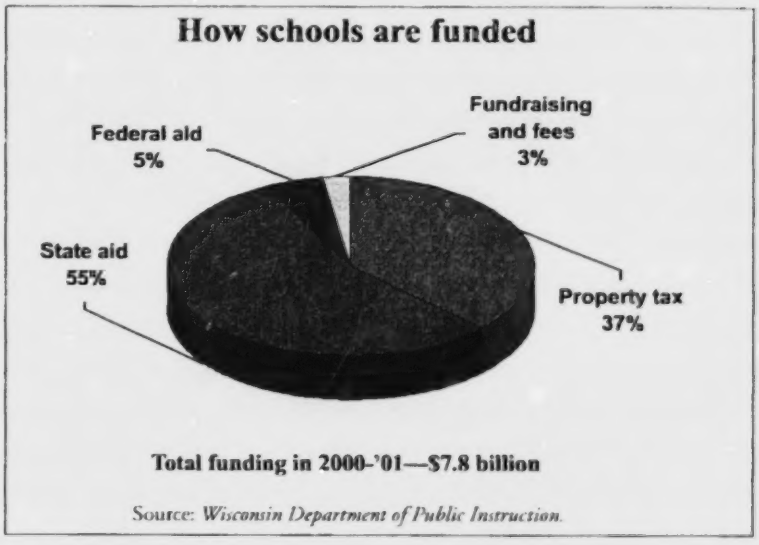
BEST COPY AVAILABLE

The current system combines a complicated three-tier state aid structure, revenue limits on school districts, and restrictions on bargaining rights for teachers. While it may have slowed the growth of school property taxes, it has not significantly lessened district-to-district spending inequalities. Revenue limits have created financial havoc for an increasing number of districts, resulting in cuts in staff, programming, and maintenance. Restricted bargaining rights have reduced teacher wages (when adjusted for inflation) and worsened teacher shortages.

Moreover, the technical complexity of the state aid system is so extreme that attempts to address specific funding problems create statewide ripple effects, often counterintuitive and counterproductive. For example, suppose the state increased funding for special education, by increasing the amount of money in the fund designated for special education. Under the revenue limit legislation, however, increasing that fund would require decreasing the fund used for equalization aid, which goes to districts based largely on their property wealth. Changing the amount in that fund, in turn, would require reworking the threshold amounts for the tiers of equalization funding, and then recalculating how much each district gets, based on the new thresholds. That, in turn, would require adjustments in the local property tax levies in every district in the state. After all this is done, there would be no straightforward relationship between how much reimbursement a district gets for its special-education expenditures, and the net effect of all these adjustments, because equalization aid depends on such factors as property-wealth per student and district spending-per-student, neither of which is related to special education expenses.

The Current Fiscal Crisis

In the 2000-'01 school year, Wisconsin school districts had more than $7.8 billion in revenue, from pre-kindergarten through twelfth grade (commonly referred to as the K-12 system). Of the total, 55.3% came from state funds, a combination of general state aid (also known as equalization aids) and special categorical funding, designed to support programs in special areas. Another 37.2% came from local property taxes, which vary in rate from district to district. The federal government contributed 5.0%, and other local sources the remaining 2.5%. [Wisconsin Department of Public Instruction, 2002]

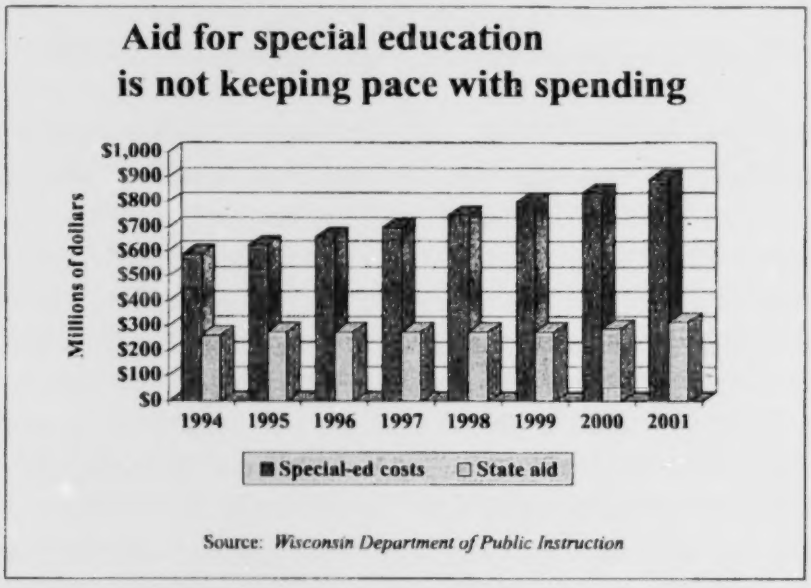


The combination of state aid and local property taxes yields more than 92% of the total funding for the K-12 system. Though a portion of that is theoretically under the control of local school boards, the interplay between state aid and local taxes is so intimate that the entire amount is, for many practical purposes, part of a unitary state finance system. Changes in the system must be accomplished at the state level.

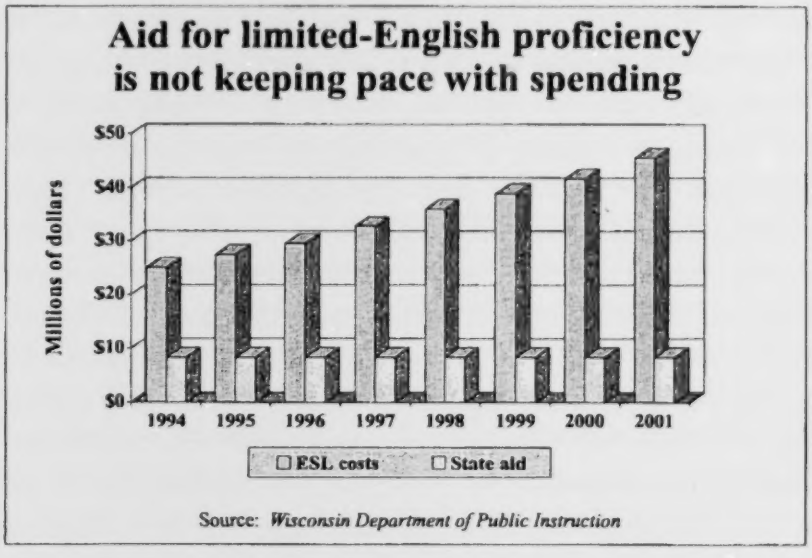
The current system has pushed an ever-growing number of school districts into financial distress:

- Annual spending increases allowed by revenue limits have been too low to cover rising costs for such critical items as health insurance for staff, textbooks, technology, building maintenance, and utilities and fuel.
- Revenue limits and state aid are based heavily on enrollment. Enrollment is now declining in more than half the state's districts but scattered across grades and schools in a district, preventing substantive reductions in operating costs.
- State and federal reimbursements for special education (education for children with disabilities) fall far short of their statutory commitment. The state pays only 32% of the total cost. The gap between spending and state aid grew from $325 million in the 1993-'94 school year to $575 million in 2000-'01. [Benson, 2001] Federal law requires that all students with disabilities be given an appropriate education. As a result, districts must take the money away from regular education programming.

BEST COPY AVAILABLE



- State reimbursements for the costs of programs for students with limited-English proficiency have also dropped. Currently, the state funds less than 17% of the total expenditures. [Benson, 2001] Covering this gap at the district level also depletes money from regular programming.



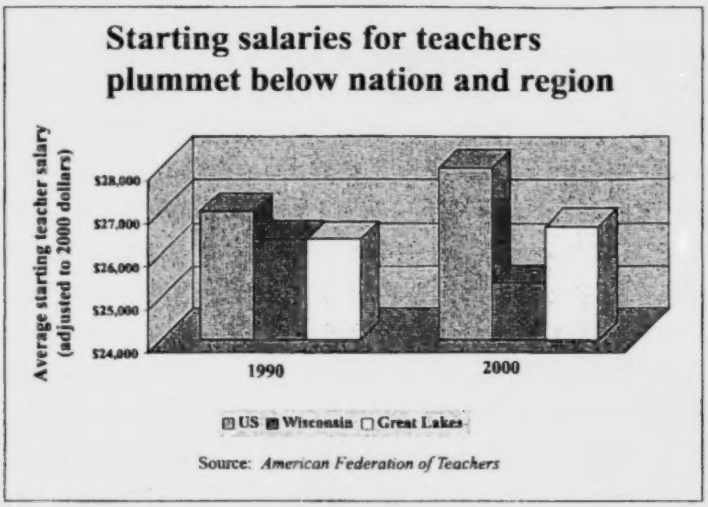
The financial shortfalls resulting from these systemic flaws have forced districts to make serious budget cutbacks. The impact of these cuts include larger class sizes; reductions or eliminations of academic, athletic, arts, at-risk intervention, extracurricular, and student services programs; outdated books and other curriculum materials; inadequate technology; and delayed maintenance. [Institute for Wisconsin's Future, 2001]

A clear symptom of the inability of school districts to operate within the confines of revenue caps is the sharp increase in the number of districts receiving referendum approval from voters to override the caps and raise local taxes to generate funding for regular operations. In the 1996-'97 school year, three years after the imposition of caps, 21 districts won such authorization. The total grew to 53 by the 2000-'01 school year and 70 for the 2001-'02 year. [Schulhofer-Wohl and Rinard, 2001]

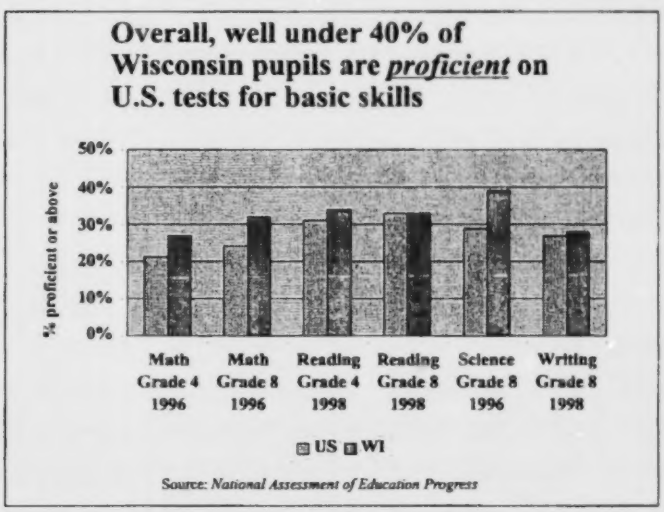
The referendum option is not a solution to the problem of financial shortage. Already-high tax rates in some districts, especially poorer districts, make such voter referenda impossible to pass. Moreover, even where referendum efforts are successful, the enormous drain of time and energy, by school officials and parent volunteers, as well as taxpayer skepticism makes it difficult to repeat the process as needs continue to grow beyond allowed revenues.

The QEO law was designed to keep teacher-wage growth under strict control, and it has succeeded. The biggest problem is that while the total wage package, including both benefits and salaries, has grown only in the range of 4% annually, the cost of benefits has risen much faster due to the sharp growth in health insurance premiums. There is no alternative to paying the much higher insurance premiums, which has left little for salary increases.

From 1990 to 2000, the average starting wage for Wisconsin public school teachers actually declined 3.8% on a real, inflation-adjusted basis. Meanwhile, average starting teacher salaries in the Great Lakes region rose 1.1%, while the national average climbed 3.7%. By 2000, average starting salaries for Wisconsin teachers trailed their regional and national counterparts by 5.1% and 10.4% respectively. [Nelson, 2001] The decline – both in real dollars and in comparison with other states – makes it more difficult for Wisconsin districts to attract new teachers and retain existing teachers, because the lower starting salary translates into lower salaries throughout the salary schedule.



Wisconsin is among the higher spending states, when it comes to public education. Wisconsin is also among the better performing states, when it comes to students' overall performance on national standardized tests. Those same national tests, however, make it clear that this is not good enough. Less than one-third of Wisconsin's students score "proficient" or above on the National Assessment of Education Progress tests, the most highly regarded national tests. Low-income students and students of color trail other students by significant amounts. [NAEP, 2002] See Appendix Two for details on the proficiency of Wisconsin students.



Structural Problems in the Current System

There are two key structural flaws in the Wisconsin school finance system.

The linkage among revenue limits, categorical aids, and the convoluted mathematical distribution formula for general aid is extraordinarily complicated. Legislators cannot address single components of the education finance system without a host of unintended consequences, and taxpayers cannot monitor overall costs and benefits. For example, the system was designed to offset the property-tax burden in districts with lower property wealth. But if the state increases its aid, local property taxes must go up in a ratio of one dollar for every two dollars of state aid. Property-poor districts may have to raise taxes in order to get more state aid.

The current funding system was designed so that the 1992-'93 school year is the base for revenue-limit calculations. Since then, spending limits have been calculated simply by applying adjustment formulas to each year's spending. A number of factors combined to determine the level of district spending in 1993: district property wealth, voters' commitment to school spending, and school board decisions to defer or to accelerate certain projects – decisions made in ignorance of the fact that the Legislature would subsequently make 1993 the basis for spending for years to come. The consequence of this system, in which one year's spending is determined primarily by spending the previous year, is that spending has direct ties neither to students' educational achievement nor to their educational needs. The school-finance structure lacks any meaningful connection to the goals or requirements of Wisconsin's public education system.

In short, the Wisconsin's school finance system is failing. It leaves school districts without sufficient funds to properly educate the state's children, and its structure is too convoluted for piecemeal adjustment. The system is adrift, lacking any meaningful connection to the purpose of public education in Wisconsin.

BEST COPY AVAILABLE

CHAPTER TWO: AN ADEQUACY SYSTEM OF SCHOOL FINANCE

From Equity to Adequacy

During the past thirty years, the history of school finance litigation has featured a major shift – a "seismic" shift, in Lawrence Picus' term – from a focus on issues of **equity** to issues of **adequacy**. [Picus, 2000] Because the legal underpinnings of Adequacy theory are so important to the development of the concept, in Wisconsin as elsewhere, it is important to briefly survey the history of that shift.

The legal roots of the movement demanding educational equity were imbedded in the historic 1954 U.S. Supreme Court ruling in *Brown v. the Board of Education*, rejecting the "separate but equal" doctrine of ethnic segregation. Extending the 14th Amendment's equal-protection clause to education, the court declared that "education is perhaps the most important function of state and local governments."

It was not a giant leap for school finance reform advocates to argue that, if the 14th Amendment required equal access to education for minorities, it should do likewise for the predominantly poor children living in low property-wealth communities. School funding systems should assure them access to the same quality of education enjoyed by children in wealthier school districts. This was precisely the argument accepted by the California Supreme Court in *Serrano v. Priest* (1971), the landmark ruling declaring that the state's property tax-based system violated the U.S. Constitution's equal-protection clause. That finding, however, was overturned by the U.S. Supreme Court in *San Antonio Independent School District v. Rodriguez* (1973), which ruled that education was not a fundamental constitutional right and that states were free to balance the values of local control and equality of educational resources.

Just one month after the Rodriguez decision, the New Jersey Supreme Court in *Robinson v. Cahill* (1973) found that wide disparities in school districts' spending caused by differences in their property wealth violated the New Jersey Constitution, based on the constitutional mandate that the state maintain a "thorough and efficient" system of education. This case opened the door to legal action nationally, and in the years since then, constitutional challenges to state educational systems have been launched in at least 44 states. [Rebell, 2001]

The pinnacle of this equity approach may have been reached in California, where the thrust of the *Serrano* case was reaffirmed, this time based on the state rather than federal constitution. A California trial judge held that district disparities in spending (for all but special-needs programs) must be less than $100 per pupil. Unfortunately, however, the result of this approach was that California achieved equality in spending simply by lowering school spending. A state that had once ranked 5th among states in per-pupil spending dropped to 42nd. [Rebell, 1999]

Gradually, the approach to educational reform based simply on equalizing each school district's taxing and spending came to be seen as problematic. It generated political resistance to court orders from

BEST COPY AVAILABLE

politicians whose districts stood to lose money, and it didn't guarantee all students an equal educational opportunity anyway, given that different levels of funding might be needed to equally educate students with pre-existing educational or socio-economic handicaps.

By the late 1980s, plaintiffs arguing for reform had begun to switch strategies, demanding not fiscal equity, but an adequate education for all. The breakthrough case for the legal theory of adequacy came in 1989 from the Kentucky Supreme Court, in *Rose v. Council for Better Education*.

The Kentucky court declared the state system of education unconstitutional and ordered the Legislature to redesign everything – not just the funding system – that stood in the way of achieving adequacy. The Kentucky court offered a detailed list of the components that it said would make up an "efficient" education, including: "sufficient oral and written communication skills," "sufficient knowledge of economic, social and political systems," "sufficient understanding of governmental processes," "sufficient self-knowledge and knowledge of his or her mental and physical wellness," "sufficient grounding in the arts," and "sufficient training in either academic or vocational fields so as to enable each child" to pursue a career. [Rebell, 2001]

The legal developments in themselves were important in starting the movement to replace the goal of equity with that of Adequacy. However, what ultimately gave Adequacy such power as an idea was the birth of the national movement for standards in public education.

Responding to warnings of national education commissions and reports like "A Nation at Risk," produced by the 1986 National Governors' Conference, chaired by Arkansas Governor Bill Clinton, states began to formulate and legislate new standards for schools. They rejected the emphasis on the then-current approach to standardized tests, which assumed that inequity was inevitable. Instead, they focused on standards of competency – rather than comparisons among students – in the expectation that all (or almost all) students can and should meet a certain standard of competency. Standards-based reform gave substantive content to the previously vague notion of adequacy.

The replacement of equity by Adequacy as a goal promised many advantages. For one thing, Adequacy is more of an absolute measure than a relative one. "Adequacy focuses on providing sufficient and absolute levels of funding to enable all children to achieve at high levels. This differs from equity, which concentrates on relative levels of distribution of funds." [Picus, 2000]

Consequently, implementing Adequacy "should also produce gains in fiscal equity because in most states it requires a 'leveling up' of low-spending districts," rather than the leveling down that occurred in California. [Odden, 2001] As courts in Kentucky, Massachusetts, Ohio, West Virginia, Wyoming and elsewhere noted, an equal amount of too little is still not enough.

Furthermore, at least in theory, Adequacy "promises to shift the nature of finance decision-making, from a process often dominated by political bargaining over how to distribute available funds to one focused on what the education system should accomplish and what educational opportunities students must be given to meet these objectives." [Hansen, 2001]

The Adequacy approach has reached a level of acceptance nationally. In 1998, the National Conference of State Legislatures endorsed it. "We recommend that state policymakers and courts apply the test of 'adequacy' as a primary criterion in examining the effectiveness of any existing or proposed state school finance system." [National Council of State Legislatures, 1998]

Adequacy and the Wisconsin Supreme Court

Wisconsin has been an exception to the growing legal power of Adequacy in the 1990s. Twice the state's system had been tested on equity grounds in the Wisconsin Supreme Court, and both times the system survived by the narrowest of margins, 4-3. The first was the case of *Buse v. Smith*, decided in 1976. The second was *Kukor v. Grover*, decided in 1989.

In the late 1990s, a third case moved through the court system, *Vincent v. Voight*. The plaintiffs in *Vincent* argued that the school finance system was illegal "because it fails to equalize access to financial resources among school districts." [*Vincent v. Voight*, 2000] In other words, the case was brought as a traditional equity lawsuit, arguing that inequality in property wealth among districts led to inequality in school resources.

The *Vincent* case was decided in July 2000, when the Supreme Court, again by a 4-3 decision, upheld the constitutionality of Wisconsin's system of school finance. The court ruled that the changes made by the Legislature in the mid-'90s – including revenue limits, the QEO, and the two-thirds commitment – had created a school finance system that "more effectively equalizes the tax base among districts than the system in place at the time *Kukor* was decided." With the *Vincent case*, then, for the third time in three tries, an equity challenge to Wisconsin's finance system had failed.

However, the Court did not stop with a simple affirmation of the existing system. Instead, it took the remarkable step of adding several paragraphs to its decision, using the unusual technique of a different 4-3 majority for the additional paragraphs, which explicitly addressed the Adequacy approach to school finance.

"Courts have turned toward adequacy as an alternative way to analyze school finance systems because the previous decisions centered on equality have not lessened the disparity between school districts," the Court wrote. [Paragraph 49] "Under the adequacy system, a state generally lists the types of knowledge that a child should possess to guide a legislature in fulfilling its constitutional obligations."

The most important part of the Court's Adequacy sections was its articulation of an Adequacy standard for Wisconsin: "We further hold that Wisconsin students have a fundamental right to an equal opportunity for a sound basic education. An equal opportunity for a sound basic education is one that will equip students for their roles as citizens and enable them to succeed economically and personally." [Paragraph 3, repeated at paragraphs 51 and 87]

Furthermore, the Court explicitly stated that equality of spending on students is not a goal of a finance system, because students with different needs and different backgrounds may need different kinds of educational support. Instead, the goal is how students perform. Quoting Peter Enrich, the Court wrote: "The objective is to adopt a standard that will 'equalize outcomes, not merely inputs.' " [Paragraph 53]

The Court further emphasized that in order to determine whether Wisconsin's system met the Adequacy test, the crucial steps would be to examine the education received by three categories of students with special needs: "disabled students, economically disadvantaged students, and students with limited English language skills." [Paragraphs 3, 51, and 87]

Wisconsin, then, is left with a somewhat ambiguous legal situation regarding an Adequacy approach to education. On the one hand, the current system has clearly been judged constitutional, having withstood three significant challenges over more than twenty years. On the other hand, the most recent case prompted a decision that both articulated an Adequacy standard and suggested that Adequacy would be the basis for deciding future school finance cases. The Court wrote: "So long as the legislature is providing sufficient resources so that school districts offer students the equal opportunity for a sound basic education as required by the constitution, the state school finance system will pass constitutional muster." [Paragraphs 3, 51, and 87]

The Court noted that the Legislature "has articulated a standard for equal opportunity for a sound basic education." While not passing judgment on the Legislature's standard, the Court summarized it "as the opportunity for students to be proficient in mathematics, science, reading and writing, geography, and history, and for them to receive instruction in the arts and music, vocational training, social sciences, health, physical education and foreign language, in accordance with their age and aptitude." [Paragraph 3]

Standards and an Adequacy Approach to School Finance

Wisconsin has no shortage of academic standards. The Supreme Court standards, set out in the *Vincent* decision, are one set among many. In 1998, the state's Department of Public Instruction set learning goals in eighteen areas, including mathematics, science, history, language, physical education, and the cultural arts. The full statement of standards is compendious and specific. For example, this is Standard A.12.2, from the twelfth-grade reading requirements: "Draw on a broad base of knowledge about the universal themes of literature such as initiation, love and duty, heroism, illusion and reality, salvation, death and rebirth, and explain how these themes are developed in a particular work of literature." [See Appendix One for a full summary of the standards.]

The standards from the Department of Public Instruction are voluntary, but districts are required to have some set of standards, one that at least satisfies the legislative test of proficiency. The Legislature spelled out a performance standard, articulated by the Supreme Court in *Vincent*, as requiring schools to offer "the opportunity for students to be proficient in mathematics, science, reading and writing, geography, and history."

An Adequacy system of finance is designed to make these standards an integral part of the finance system. The state must determine the resources needed in schools to ensure students an equal opportunity to meet these standards and the level of funding required for schools to secure and maintain these resources.

Adequacy should not be confused with equality. Some students – those with special needs, including students with disabilities, with limited English, and students from low-income households – may require more resources in order to meet proficiency standards. Therefore, districts with differing proportions of students with special needs will have differing Adequacy requirements.

Further, in an Adequacy approach, the amount of funding deemed sufficient is only a floor, not a ceiling, on the amount of money districts can spend. Districts can opt to spend more than the amount defined as sufficient.

An Adequacy approach to school finance thus establishes a sequence of steps to be taken in determining the level of school funding:

1. Standards are set.
2. It is determined what resources are needed for schools to meet those standards.
3. The resources are priced, to determine the necessary level of spending.
4. If the required level of spending is too high to be affordable, then:
    a. It is necessary to return to the original standards (Step 1) and modify them, so that the resources needed to satisfy the standards are affordable;
    b. Alternatively, a gradual phase-in process must be established to adjust the level of spending, over time, to support an adequate level of resources.

CHAPTER THREE: THE PROCESS FOR DETERMINING ADEQUATE RESOURCES

The Method

This Adequacy program was developed using methodology pioneered by James Guthrie and Richard Rothstein, school finance scholars at Vanderbilt University and the Economic Policy Institute, respectively. Their methodology was used most recently in Wyoming, following a 1995 decision by the state supreme court, in *Campbell County School District vs. State of Wyoming*, that the school finance system was unconstitutional and needed to be replaced by one providing every student with resources sufficient for a "proper education." The Guthrie/Rothstein approach was developed for the Wyoming Legislature. Their approach was judged by the Wyoming Supreme Court to be "capable of supporting a constitutional school finance system." [*Campbell County School District vs. State of Wyoming*, 2001]

School finance scholars recognize several methods "to determine the cost of an adequate educational program." [Picus, 2000] Picus' delineation of three methodologies is similar to that of other experts. He describes them this way:

- The cost-function model uses complex statistical analysis (econometrics) to determine the inputs needed to reach a given level of student outcomes, based on existing data on spending, student achievement, and student-body characteristics.
- The observational method, sometimes called the model-district method, uses individual school districts that meet previously identified outcome levels, assuming that relatively high-performing but otherwise somewhat typical districts can be used as a model for adequate spending.
- The professional judgment model, sometimes called the resource-cost or market-basket method, relies on the judgment of education professionals to create an instructional model – designed so students will meet designated standards – for which the costs can be estimated.

The cost-function model is mathematically complex and involves various simplifying assumptions. The observational model can involve difficult, sometimes controversial assumptions about which districts are selected as the basis for costs.

The Institute for Wisconsin's Future used the professional judgment model as implemented by Guthrie and Rothstein. "Teams of educators are brought together to define the components needed to establish a prototype school that, in their opinion, will have enough resources to enable a specified percentage of students to meet established standards. The cost of those resources is then estimated to ascertain an adequate level of funding." [Picus, 2000]

The process used for this report, then, employed expert panels of education specialists to define resource components needed to attain Wisconsin educational standards. The process involved multiple steps:

- Preliminary research to set the planning groundwork;
- Selection of the expert panels;
- Specialist assessment of necessary resource components;
- A statewide survey of educators on the resource components selected;
- A synthesis of information by state and national experts defining the key staffing, program, and equipment requirements for quality schools;
- A cost analysis of the designated components.

The Process

The process began with an initial review of educational research literature on the resources and strategies most likely to yield educational gains. Through this research, it was determined that the resource categories to be examined would be school size, class size, curriculum, educational materials, technology, and services.

With advice from Guthrie, along with John Augenblick and John Myers, whose Denver, Colorado-based consulting firm is a national leader in school finance studies, IWF selected members for the panel of experts. Panel members were selected to satisfy three criteria: academic expertise in designated areas of curriculum, leadership in educational organizations, and breadth of knowledge of elementary, middle and secondary school operations in urban, rural and suburban districts. Forty-five people participated in the preliminary planning process, including academics, principals of successful schools, teachers active in curriculum development, and national experts in education planning. Teachers came from a range of subject areas to ensure appropriate attention to various skill and knowledge goals. [A list of panel members is included in Appendix Four.]

The first formal expert panel session, in December 1998, developed preliminary recommendations on the resources needed for model school programs. Panel members were provided with extensive materials before the meeting, which summarized previous research, outlined the conceptual goals, and described the planning process. The academic standards used were the Wisconsin Model Academic Standards, produced in 1998 by the Wisconsin Department of Public Instruction. A summary of those standards, as presented to the panelists, is found in Appendix One.

Using the Wisconsin Model Academic Standards, best-practice research, and their own areas of expertise, the panels identified essential instructional and operating system components of model school programs at the elementary, middle and high school levels. Key components of the resource standards included teaching staff, curriculum, technology, equipment and materials, administration, and special services. There was a strong effort to ensure that the models remained pragmatic and focused on meeting a high minimum standard, rather than a utopian vision.

The Public Policy Forum, a well-established non-partisan, non-profit Milwaukee research organization, then conducted a survey of all Wisconsin public school principals and a random sample of public school teachers. The purpose of the survey was to determine what staffing, technology, curriculum, and equipment resources educators viewed as necessary to meet Wisconsin's educational standards. Completed surveys were received from 396 principals and 767 teachers. This amounts to an overall response rate of 25% among principals and 17% among teachers, in the typical range for mailed, self-administered survey questionnaires.

Principals and teachers agreed that small classes and small schools were necessary for effective educational environments, views consistent with research on smaller class and school size. The judgments regarding appropriate and optimal class sizes were similar across urban, rural, and suburban districts and were consistent, regardless of the conditions prevailing in the schools in which they work. There was less consistency in views regarding school size. Nonetheless, almost all of the respondents indicated that student achievement would be improved if Wisconsin's schools were smaller than those in which they currently work.

The classroom resource that was most likely to be rated as "very important" was computer access. There was also general agreement that textbooks should be replaced every five years.

Over 90% of the respondents in both principal and teacher groups agreed on the need at the high school level for language arts electives, classes in music performance and fine arts (painting, drawing, and sculpture), and industrial arts or vocational education. Over 80% of both groups agreed upon the need for third- and fourth-year classes in a foreign language, and advanced placement courses in the core subject areas of science, social studies, English, and math. Over 90% of educators felt that music performance and fine arts classes should be available in middle schools and elementary schools.

Teachers were asked to estimate both the number of hours they currently spend and the number of hours they need to spend each semester improving their technical skills, learning and implementing new curriculum, and coordinating their activities with other teachers. The responses show that teachers spend, on average, 28 hours per semester on these activities, and estimate they need to spend 58 hours. [Survey details are found in Appendix Three.]

In May 1999, fifty educators reconvened. The group included members of the initial panels as well as additional experts, especially in special education. The second meeting used the preliminary recommendations, survey data, and new research to finalize resource recommendations. Final recommendations are found in Appendix Five.

CHAPTER FOUR: ADEQUATE RESOURCES TO MEET WISCONSIN STANDARDS

Introduction

The specification of resources for adequate schools is divided into three parts. The first lays out Core Resources, those needed for every school (along with special resources for rural schools). These include the need for small schools, small classes, broad curriculum, well-trained and well-compensated teachers, appropriate technology, and special supplemental funding for rural schools.

The second part describes resource needs for students with special needs: students with disabilities, students with limited-English proficiency, and students from low-income households. For special education and English-as-a-Second-Language programs, this means full reimbursement to districts. For students from poor households, this means wage supplements for teachers and other professional staff, summer school, and extra tutoring.

The third part details overall staffing requirements for the prototype schools – that is, for schools meeting the adequacy resource needs elaborated in the first two parts.

I: Core Resources

A. Small Schools

Recommendation: 350 students maximum for elementary school, 500 maximum for middle school and 600-1,000 maximum for high school. Abundant evidence shows that smaller schools have higher student achievement, extracurricular participation and attendance; less misbehavior; and greater satisfaction for teachers and administrators. Researchers have found that small schools foster positive attitudes among students, teachers, and parents; more parent involvement; and more openness to educational innovation.

Why create small schools? asks Patricia Wasley in her recent report on Chicago's experience. Her answer: "To create small, intimate learning communities…To reduce the isolation that too often seeds alienation and violence…To reduce the devastating discrepancies in achievement…And to encourage teachers to use their intelligence and their experience to help students succeed." [Wasley, 2001]

Small schools come in a variety of shapes and sizes. Some are freestanding and some are schools-within-a-school. Research confirms what most parents know intuitively: Smaller schools are more productive because students feel less alienated and more connected to caring adults. Teachers feel that they have more opportunity to teach effectively and to know and support their students.

BEST COPY AVAILABLE

Wasley's recent Bank Street College study of small schools in Chicago found "that students' attachment, persistence, and performance are all stronger in the small schools." Students in Chicago's small schools had better attendance rates; significantly lower dropout rates; higher grade-point averages; fewer failed courses; stronger achievement test scores; and fewer elementary students repeating a grade. [Wasley, 2001]

Similar results were obtained by a University of Minnesota study of schools in 12 states. "Smaller schools, on average, can provide a safer place for students; a more positive, challenging environment; higher achievement; higher graduation rates; fewer discipline problems; and much greater satisfaction for families, students, and teachers." [Nathan, 2001]

Chicago and Baltimore recently announced plans to restructure high schools by creating smaller schools within their systems. The Chicago initiative will use $18 million to close four to six large high schools and reopen them with two or more schools within the same building. [Quintanilla, 2001] In Baltimore, a $55 million, five-year program will break apart large schools into smaller schools-within-schools and open up to eight brand new small high schools [Bowie, 2001]

While the call for small schools is heard with increasing frequency in the nation's cities and suburbs, where large schools dominate, many rural communities are being forced to defend against attempts at forced mergers. The recommendations above for small-school maximum sizes should be not be viewed as supporting the forced merger of even smaller rural schools. Indeed, rural schools, because they will often be smaller than urban schools, may have additional administrative costs.

The move toward building bigger schools began as early as the 1920s in America, but sped up after the Soviets launched Sputnik in 1957. Former Harvard President James B. Conant's best-selling 1959 book, *The American High School Today*, blamed America's besting in space by the Russians on poor science instruction. He called for the consolidation of schools into units big enough to offer specialized instruction in math, science, and foreign languages.

Conant actually recommended high schools of about 750 students, but his book somehow became a justification for gargantuan buildings. After 1960, the average size of schools tripled, with many inner-city schools ballooning to 3,000 students.

In Wisconsin in 2000, according to *Education Week*, 57% of Wisconsin students were in high schools with more than 900 students, 56% in middle schools of more than 600, and 68% of students in elementary schools of more than 350 students. [*Education Week*, 2000]

What number of students does it take to qualify as a "small" school? The numbers in our recommendation are based on a variety of suggested figures. For example, Florida recently adopted legislation

setting 900 as the upper limit for new high schools, 700 for new middle schools, and 500 for new elementary schools. [Rural Trust, 2000] Richard Riley, former Secretary of Education, has suggested 600 as the upper limit for all schools. [Riley, 1999]

Students, teachers, and parents at such schools, noted researcher Kathleen Cotton, "come to know and care about one another to a greater degree." In 1996, Cotton reviewed 103 studies on small versus large schools and found significant benefits for small schools. Her conclusions have been re-affirmed by various studies since then. Cotton reported that 22 studies that measured student achievement typically found better results at small schools. Not one study found large schools superior. The difference in achievement was even greater for students from a low socio-economic background. [Cotton, 1996]

Lee and Smith analyzed data on 789 high schools from the National Educational Longitudinal Study and found that "large schools are quite problematic environments for learning." [Lee and Smith, 1996] Howley and Bickel examined data for 13,600 schools in 2,290 districts in Georgia, Montana, Ohio, and Texas. The researchers found remarkably consistent results (for instance, on 27 of 29 test scores in Georgia) and a remarkable payoff for low socio-economic status students in small schools. [Howley and Bickel, 1999]

The small-school environment has a humanizing effect. In small schools, Cotton notes, "everyone is needed to populate teams, offices and clubs; thus, even shy and less-able students are encouraged to participate and made to feel they belong. As schools grow larger…a twenty-fold increase in population produces only a five-fold increase in participation opportunities." [Cotton, 1996]

Walberg and Fowler have found that big schools are actually less cost-effective per dollar in producing student achievement. [Walberg and Fowler, 1997] Stiefel studied 133 New York high schools and found that because big schools had a dropout rate 250% higher than small schools, the small high schools actually cost 17% less per graduating student. [Stiefel, 1998]

B. Small Classes

Recommendation: Classes with a maximum of 15 students for kindergarten through third grade in schools where at least 30% of the students are eligible for free lunch, and 20 students otherwise; a maximum of 22 students for fourth and fifth grades; and a maximum of 25 students in sixth grade and above. Studies on programs such as Wisconsin's SAGE program (Student Achievement Guarantee in Education), the STAR program in Tennessee (Student/Teacher Achievement Ratio), and others show the payoff for small elementary classes. Research shows that small classes can also reduce the achievement gap between students of color and others.

Smaller classes are a strong favorite among parents, leading to significant political support for such projects as Wisconsin's SAGE, which provides state aid to reduce the size of kindergarten through third-grade classes to fifteen, in schools with large numbers of children from low-income households. In addition, there is a significant body of evidence that smaller classes are effective, especially at the earliest grades, for low-income students.

By the mid-1980s, there was already enough evidence of the benefits of smaller classes to set in motion several large-scale projects and one closely watched experiment. Indiana, Texas, Tennessee, California, and Wisconsin all engaged in class-size reduction programs. [Finn and Achilles, 1999; Robinson, 1990]

The most significant for its impact on policy nationwide was Tennessee's STAR project. This was a longitudinal study of more than 11,000 students, and gave Tennessee's state government convincing data to support class-size reductions statewide. At each grade level kindergarten through third grade, the STAR project used controlled studies to determine where classes of 13 to 17 students made a difference in performance, compared with classes of 22 or more. The STAR results were that students in small classes outperformed students in larger classes on every test administered. The benefits were greater for students of color and those in inner-city schools than for white students or those outside urban areas. In addition, students in small classes at the earlier grades performed better in subsequent grades, and were more likely to graduate from high school and take college admission tests. [Finn, Gerber, Achilles, and Boyd-Zaharias, 2001; Krueger and Whitmore, 2001]

Wisconsin's SAGE program was not an experiment, as was STAR, but rather a reform whose effectiveness was presumed. The program is targeted at schools with 30% or more students below the poverty line, in districts with at least one school with 50% or more of children living in poverty. The positive effect of small classes, especially for students of color, reproduces the results from Tennessee's STAR project. [Molnar and colleagues, 1999 and 2000]

The benefit for students of color is an especially important conclusion of the Tennessee and Wisconsin projects. "Both the STAR and SAGE studies report considerably higher achievement differences of smaller classes for minority students than for white students." [Witte, 1999] Even researchers strongly critical of sweeping class-size reduction programs acknowledge the benefit of smaller classes for the youngest African-American students. "African-American students are, on average, doing better in smaller classes, while all other students from all other ethnic groups seem to have a negligible achievement effect from being in smaller classes." [Hruz, 2000]

The U.S. Department of Education's review concluded that "a consensus of research indicates that class size reduction in the early grades leads to higher student achievement. Researchers are more cautious about the question of the positive effects of class-size reduction in fourth through twelfth grades. The significant effects of class size reduction on student achievement appear when class size is reduced to a point somewhere between 15 and 20 students, and continue to increase as class size approaches the situation of a 1-to-1 tutorial." [U.S. Department of Education, 2000] Thus, while a general reduction in class size is recommended, the focus should be on the earliest grades.

BEST COPY AVAILABLE

C. Broad Curriculum

Recommendation: In addition to the basic curriculum, art, music, and foreign language instruction should be offered at all levels of education, and Advanced Placement in all high schools. Besides the benefit of learning a second language itself, and the broadened cultural outlook it promotes, research suggests that the instruction enhances a student's memory and listening skills, cognitive thinking, and overall verbal achievement level. The stimulation and emotional/intellectual connections offered by arts instruction have a wide-ranging impact, from higher overall achievement and attendance to more creativity.

The movement of states to create higher standards has led, in some states, to a greater emphasis on "the basics," such as English, mathematics, and science, at the expense of art, music and foreign language. However, most educators and parents recognize that these so-called frills are an essential part of a basic education. IWF's survey of state teachers and principals found that the vast majority favored music, art, and foreign language instruction at every educational level.

Wisconsin's model academic standards reflect this consensus, and call for such instruction in elementary, middle and high school levels. Many Wisconsin schools, however, do not offer this instruction.

Research shows a wide range of benefits associated with the early study of foreign language. Students who study a second language are better able to see patterns in language [Mead, 1983]; have improved memory and listening skills [Curtain, 1990]; and enhanced creativity and cognitive thinking. [Hamayan, 2001; Foster and Reeves, 1989; Landry, 1974; Kessler and Quinn, 1980]

The logic of starting foreign language instruction in elementary grades is that it gives students more time to learn the language and reap the benefits of this knowledge. Younger pupils are better mimics, tend to be less afraid to make mistakes, and end up having better pronunciation.

The benefits of early instruction in art and music are compelling. As the Wisconsin Model Academic Standards note, "students deprived of sensory stimulation such as that provided by music have been likened by educational researchers to youths who have sustained a degree of brain damage...Research has shown that the mind must have rich sensory experiences if it is to develop to its highest potential."

The arts provide a kind of developmental pathway for young learners, creating a connection between the emotions and the intellect, the mind and the body. In part because of their connection to students' emotions, "The arts engender enthusiasm and motivation for learning" and "can encourage higher attendance and decrease drop-out rates," the President's Commission on the Arts and Humanities (1996) noted. The Commission also reported that students receiving instruction in the arts score higher than other students in history and writing, reading, and mathematics.

Students in arts programs are eight times more likely to win a community service award, four times more likely to win an award for writing an essay or poem, three times more likely to participate in a science or math fair, twice as likely to win an award for academic achievement, and one-third more likely to be planning a post-secondary education. [Heath and Roach, 1998]

D. Well-trained and Compensated Staff

Recommendation: Staff development time at the rate of an average of one class period per day for each teacher, and the appointment of a staff development coordinator to assure a systematic approach to in-service training. Research shows that teacher quality has a marked impact on student achievement, and that staff development, if properly structured, can improve a teacher's effectiveness. Studies also show that educational improvements, from adding computers to decreasing class size, will not be as successful without trained teachers to adapt their instructional methods accordingly. Schools need staff development coordinators to oversee the creation of well-structured professional programs. Also, released-time for teachers is required, which may require teacher aides to handle some duties to free teachers for in-service training.

Recommendation: An across-the-board wage increase of 5% for all teachers in Wisconsin, to compensate for the systematic impact of the Qualified Economic Offer law. The ability to attract and to retain qualified teachers is related to wage levels, and the impact of the QEO caused both average starting salaries and average salaries overall for Wisconsin teachers to fall in relation to those of neighboring states and the nation as a whole. At the same time, districts should be encouraged to explore alternative compensation mechanisms, that might provide both opportunities for increased compensation for advanced teachers, and greater correlations between pay and accomplished teaching performance.

1. Staff Development. While much of the difference in teacher quality is accounted for by college training and years of experience, there is considerable evidence that staff development can be a significant factor in improving performance. Joyce and Showers' review of 200 studies of staff development concluded: "Teachers are wonderful learners. Nearly all teachers can acquire new skills that 'fine tune' their competence. They can also learn a considerable repertoire of teaching strategies that are new to them." [Joyce and Showers, 1980]

Research has shown that staff development is the key to the successful implementation of any effective schools project. That's true for computer-assisted instruction, as discussed earlier. Similarly, reductions in class size are more likely to have an impact if teachers modify their instructional strategies. [Seaburn and Sudlow, 1987].

IWF's survey found that teachers spend about 28 hours a semester on staff development, but estimate they need to spend 58 hours a semester. "In contrast to their counterparts in many European and Asian countries, most U.S. teachers have almost no regularly scheduled time to consult together or to

learn about new teaching strategies," the National Commission on Teaching and America's Future (1996) concluded. The commission noted that U.S. school districts spend less than 1% of their resources on staff development, far less than the 8%-10% invested by most corporations and many school systems in other countries.

Lawrence Gordon's review of 97 studies (1974), Joyce & Showers' analysis of 200 studies (1980), and considerable other research suggests that certain elements are common to successful staff development programs:

- The principal must participate in developing and overseeing the program.
- Teachers must be involved in planning the program. In short, as Weathersby and Harkreader note (1999), collaborative planning is most successful, rather than a "top-down" (principal-dictated) or "grass-roots" (teacher-controlled) program.
- The structure should include the presentation of a new theory or theories with modeling/demonstration of its application.
- Teachers need low-risk practice: a chance to practice the new approach, perhaps with coaching, or with peer review. "Teachers learn the knowledge and concepts they are taught and can generally demonstrate new skills and strategies if provided opportunities for ... modeling, practice or feedback." [Joyce and Showers, 1980]
- "Regular and consistent feedback is probably necessary if people are to make changes and maintain those changes." [Joyce and Showers, 1980]
- The program should be ongoing rather than a "one-shot dog-and-pony show" as Halsted (1980) puts it. A typical, successful program had teachers work with a consultant/coach in a summer training session, with four follow-up sessions during the school year. (Ellis, 1984]
- The program should focus on improving student performance. [Weathersby and Harkreader, 1999]

2. Teacher Compensation. Three issues are involved in determining appropriate teacher compensation: one is the general wage level for teachers nationwide; a second is the specific impact in Wisconsin of the QEO law; a third is the appropriateness of structural changes in compensation techniques, in order to align them more closely with educational goals.

"Because improved student learning is largely caused by better classroom instruction, effective educational initiatives must provide a high quality teacher in every classroom. To achieve this goal, teacher salary levels need to rise, teacher salary structures must change to reinforce the goals and needs of standards-based education reform, and finance structures must fund these new salaries." [Odden, 2000] Odden is well-known for his support of compensation systems based on what he calls "knowledge- and skills-based pay." While such alternative compensation systems draw divided opinion, there is considerably more agreement on the need for an overall level of compensation more appropriate to attract and retain the kind of quality teachers needed.

As noted earlier, the effect of the QEO has been to lower average starting salaries for Wisconsin teachers over the past decade, in inflation-adjusted terms. In addition, average starting teacher salaries have fallen in comparison with those in neighboring states and in comparison to the national average. [Nelson, 2001] An across-the-board adjustment, along with elimination of the QEO law, would help restore competitive balance to Wisconsin teacher salaries.

E. Appropriate Technology

Recommendation: At least five computer terminals should be available for every twenty students. Staff and other resources should be available to network, maintain, and upgrade the computers. Appropriate technology promotes more efficient, individualized, and cooperative learning, where students are more involved in the educational process and teachers are better able to adapt to the needs of all students.

Computers promote individualized learning. The computer is patient and non-judgmental and allows students to follow diverse paths toward a goal. "The children control the pacing and action. They can repeat a process or activity as often as they like and experiment with variations." [National Association for the Education of Young Children, 1996] The teacher works more as a facilitator than a lecturer, more with small groups than the whole group. [Wilson, 1993]

Computers enhance cooperative learning. Numerous studies suggest that children prefer working at computers with one or two partners rather than alone and often seek help from one another. [National Association for the Education of Young Children, 1996] "Children spend nine times as much time talking to peers while on the computer than while doing puzzles" and 95% of such talk is related to their work. [Clements, 1998]

Technology increases equalitarian learning. One study of computers in the classroom found that rather than focusing on the bright students or those who raise their hand to answer questions, the teacher spent twice as much time as before with slower students. [Wilson, 1993]

Numerous studies have also demonstrated that "technology is particularly valuable in improving student writing. The ease with which students can edit their written work on word processors makes them more willing to do so." [Coley, 1997]

Any such change, however, is unlikely to happen without properly trained leaders. Computer-assisted instruction has proven more successful when teachers receive training [Wenglinsky, 1998] and is likely to fail without it. [Archer, 1998] New technology programs that offer less than ten hours of in-service training to teachers actually have negative results. [Clements, 1998] As Wenglinsky has found, teachers of urban and rural students are less likely to have had professional development in technology than suburban teachers.

That may help explain studies which show that teachers in high-poverty schools are more likely to ask students to "do what the computer tells them to do," meaning drill and practice, while teachers in more

BEST COPY AVAILABLE

affluent schools typically use technology to engage students in problem solving and critical thinking. Skilled computer specialists to provide instruction and maintenance are critical. A strong computer coordinator "seems to give other teachers the courage to charge ahead in the use of technology." [Wilson, 1993]

States and districts often underestimate the costs of education technology by reporting only the capital costs of acquisition rather than total cost of ownership. Acquisitions costs can be as little as 25% of the actual lifetime cost of technology integration. The true total cost also includes expenses associated with deployment, maintenance, and troubleshooting, including such things as software, service, support, and training. The failure to recognize and budget adequately for total costs is a likely contributor to the uneven and sometimes ineffective utilization of technology in the nation's schools. [Hansen, 2001]

F. Rural Schools

Rural schools have financial needs over and above those of schools in more populated areas. First, their smaller size creates diseconomies of scale. For example, individual schools still need to have a principal, but the relatively small enrollments mean higher ratios of administrators to students, leading to higher relative costs.

Second, rural schools have greater transportation costs on a per-student basis, because of the longer distances needed to bus students to and from school.

Third, rural schools have greater need for distance-learning technology, because their size prevents them from having the full diversity of teaching capabilities that larger schools are able to have.

For this report, districts were classified as rural if they satisfied all the following criteria:

- A student population density less than the state average of 16 students per square mile;
- Not located in a county contained in a Metropolitan Statistical Area, as defined by the U.S. Census Bureau;
- Not otherwise a suburban or "bedroom" community or a district concentrated within a non-metropolitan town or city.

Slightly over half Wisconsin's 426 districts satisfy these criteria: 245 districts, or 58% of all districts. These districts cover 78% of the state's area, but include only 25% of the state's total enrollment.

The average density in rural districts is 5 students per square mile, compared with an average of 54 students per square mile in non-rural districts. The average enrollment of rural districts is 903 students, compared with an average of 3,586 in non-rural districts. The average annual per-pupil transportation cost in rural districts was $448, which was 34% higher than the average for non-rural districts. [All figures are for the 2000-'01 school year, and calculated based on data from the Wisconsin Department of Public Instruction.]

II: Resources for Students with Special Needs

Three categories of students with special needs deserve separate treatment, for two reasons. The first reason is simply the demands of justice and fairness, which require that these students, who labor under special difficulties through no fault or choice of their own, have the same opportunity for success as those students without these special needs. The second reason is legal: the Wisconsin Supreme Court, in its 2000 decision in the *Vincent* case, declared these three categories of students to be the ones the Court would be specially concerned with in deciding future school finance cases.

In its *Vincent* decision, the Court first held "that Wisconsin students have a fundamental right to an equal opportunity for a sound basic education." It went on to point out that students and districts are not identical, like interchangeable components: "An equal opportunity for a sound basic education acknowledges that students and districts are not fungible and takes into account districts with disproportionate numbers of disabled students, economically disadvantaged students, and students with limited English language skills. So long as the legislature is providing sufficient resources so that school districts offer students the equal opportunity for a sound basic education as required by the constitution, the state school finance system will pass constitutional muster." [*Vincent v. Voight*, paragraph 3]

Thus, we must pay special attention to the categories of students with special needs identified by the Court: students with disabilities, students from poor households, and students with limited-English proficiency. A finance system that does not do so is at great risk of being declared unconstitutional, should a suit attacking financing for these students reach the Supreme Court.

Notice that the Supreme Court does not mention ethnicity. Given the well-known, strong correlations between poverty and ethnicity, especially for African-Americans, any program devoting special resources to children in poverty will at the same time provide special resources for children of color. For this reason, this report does not specifically address particular needs of children of color.

A. Special Education

Because federal and state mandates outline the programs and services that students with disabilities must receive by law, this report on educational Adequacy does not address the curricular or staffing needs particular to special education programs. The funding model does require, however, that all expenses incurred by school districts to meet the educational and support needs of students with disabilities be reimbursed in full by state and federal governments.

For the 2000-'01 school year, the Wisconsin Department of Public Instruction estimated there were more than $945 million in eligible costs incurred by districts for special education. State reimbursements covered about 33% of those costs. [Benson, 2001]

BEST COPY AVAILABLE

B. Limited-English Proficiency

Students from immigrant families, who need help in acquiring and/or improving English-language skills, must be provided with appropriate instruction and class support, under state law. Currently, however, the state reimburses districts for less than one-fifth of these costs. Moreover, the reimbursement and mandate to offer instruction exist only where at least a threshold number of students need assistance. The threshold requires that, within a district, there be at least ten or more students in a single language group in kindergarten through third grade, or twenty or more in higher grades. The state Department of Public Instruction estimated that in 1999, nearly 30% of the state's more than 25,000 limited-English proficiency students were in situations not meeting the threshold requirement. [Benson, 2001]

As immigration increases nationwide, Wisconsin also has experienced a significant increase in the number of families coming from diverse countries. During the decade of the '90s, there was a 50% increase in the number of Wisconsin residents, at least five years old, who did not speak English "very well," the U.S. Census Bureau estimates. The number of foreign-born state residents jumped 77% during the decade. In addition, 47% of the state's more than 215,000 foreign-born residents arrived in the U.S. during the 1990s. [U.S. Census Bureau, 2001]

Under the Adequacy model, districts would be reimbursed for the full cost of special programming for students with limited-English proficiency, regardless of the number of such students or the number of language groups represented.

C. Children in Poverty

Not all children come to school equally prepared to learn. It has been well known for many years that poverty is strongly associated with children being at risk of poor academic performance. It is difficult, however, to obtain accurate data on the number of children in poverty in a particular district or school, because the only statistically reliable data for that level of geographical detail are from the national census. Unfortunately, data from the 1990 census are out-of-date, and relevant data from the 2000 census are not yet available.

As a substitute for census data on student poverty, most school policy and research is based on the number of children eligible for free or reduced-price school lunch. Eligibility is based on household income and size, as asserted by a parent or guardian. For this report, the incidence of student poverty was based on the Department of Public Instruction's most recent count (October 2000) of children eligible for free lunch. Statewide, 19% of public-school students were eligible for free lunch. District figures ranged from a low of 0% to a high of over 60% in the Lac du Flambeau, Menominee, and Milwaukee school districts.

While there is consensus that poverty is strongly correlated with academic risk, there is disagreement about the extent to which schools can address problems of children in poverty. Just as schools cannot

BEST COPY AVAILABLE

be held responsible for eradicating the effects of ethnic and economic segregation in housing, they cannot be blamed for being unable to undo all the effects of poverty. Nevertheless, there are schools serving high proportions of at-risk children that do produce relatively high achievement.

Recommendations for special programming for children in poverty fall into two categories. The first group includes items directly related to school programs and resources, items critical for significant improvement in the academic performance of children from poor homes. These include intensive tutoring and enrichment programs to supplement regular class work; summer school, to help reduce the summer slippage in academic skills that intensifies the achievement gap between low-income students and others; and salary incentives to encourage the most experienced teachers to work in schools with high poverty, rather than exercising seniority rights to move to schools that may be "easier" to work in.

The second group of recommendations goes beyond what is included in traditional school budgets or traditional school programming. These items attempt to address some problems in the social environment of poor children, problems that undermine the ability of children to take full advantage of the educational opportunities in the classroom. These include early childhood services for children and their parents, before children enter the school as kindergarteners; medical services, including dental, to make sure children are healthy enough to take full advantage of the school environment; and intensive programming to increase the level of parental involvement in their children's education.

Only the first group of recommendations is considered in detail for this report. In particular, only this group is subjected to the cost-out analysis to determine the price of adequate resources.

This is not because the other programs are less important. Indeed, because they have so much impact on getting children ready to make the most out of school, they are probably more important. The marginal cost of adding extensive pre-school programming, however, or of adding a full range of medical and dental services, is potentially enormous.

In addition, a number of government programs already address some of these programming needs, albeit often in a scattered, uncoordinated fashion which leaves far too many children without adequate services. Closer coordination of services - for example, breaking down bureaucratic barriers between schools and medical programs - would likely not only bring services to more children but also do so with greater efficiency than now exists. Resources could be integrated into the school model through partnerships among school districts, childcare providers, and community health care systems. There are currently various "lighted schoolhouse" models where schools have created wrap-around programs for communities that incorporate health care, childcare, and other critical services.

BEST COPY AVAILABLE

1. High Teacher Quality. Recommendation: Bonus payments of $3,000 annually for teachers (and other education professionals including, counselors and principals) in schools with 30% or more of their students eligible for free lunch, to increase attraction and retention of skilled and experienced teachers. Teacher quality is frequently cited as the main school-level factor in differential achievement outcomes between at-risk students and their more advantaged peers. According to a study by the National Commission on Teaching and America's Future, "Teacher qualifications (as measured by scores on licensing exams, years of education, and personal experience) accounted for approximately 40% of the measured variance in students' reading and math scores on standardized tests...an impact more significant than class size, parents' education, income or language background." [National Commission on Teaching and America's Future, 1996]

A 1998 study in Tennessee found that students with three consecutive years of "instruction by ineffective teachers scored as much as 50 percentile points lower on the statewide assessments tests than students who had a string of effective teachers." [Sanders and Rivers, 1998] Yet, those students most in need of high-quality teachers are less likely to be taught by them. In schools with the highest minority enrollments, students have less than a 50% chance of getting a science or math teacher who holds a license and a degree in the field he or she teaches. [National Commission on Teaching and America's Future, 1996]

The most effective teachers couple high expectations with individual support focused on helping students succeed in school and beyond. Advocacy and other forms of personal intervention, role modeling, the provision of emotional and moral support, and of "regular, personalized, and soundly based evaluative feedback, advice and guidance" are examples of teacher practices especially important for at-risk students. [Stanton-Salazar and Dornbusch, 1995]

The needs are clear, but as teachers become more skilled and experienced, they often use their seniority to move into jobs in schools where poverty rates are low, students are more skilled and discipline problems are more manageable. Given the seniority system in teaching, the best and brightest often move to districts with less poverty, where pay is higher, stress is lower, and demands are less overwhelming.

"The implications for reform are clear. The way to make sure that there are qualified teachers in every classroom is to upgrade the job of teaching. Well-paid, well-respected occupations that offer good working conditions rarely have difficulty with recruitment or retention." [Ingersoll, 1998]

2. Summer School. Recommendation: Six weeks of summer school for low-income children. Socio-economic differentials in learning worsen during the summer vacation. Studies from the 1970s through the 1990s indicate that low-income children slip back academically during the summer months in ways not occurring among higher-income children. "The summer appears to be a time when the reading skills of inner-city children stagnate and their math skills decline... The sum of the differences over many summers was so great that it accounted for more than half of the difference in word-knowledge skills between older inner-city children and older middle-class children." [Murname, 1975]

BEST COPY AVAILABLE

Cooper reported that summer vacations in elementary school resulted in a reading achievement gap of approximately three months per year (on average) between middle- and low-income students, which accumulates to 18 months by sixth grade and two or more years by middle school. [Cooper, 1996] The Baltimore Beginning School Study in 1997 found a similar pattern in the Baltimore schools. [McGill-Franzen and Allington, 2001]

Summer school appears to mitigate this loss among lower-income students. A longitudinal study of a summer program called Teach Baltimore, operated through Johns Hopkins University for low-income children, found that of the students who actively participated in the program - attending at least 75% of the classes - made significant gains, with kindergarteners scoring higher than 81% of control-group peers and first-graders scoring higher than 64% of their control-group peers. [Bowie, 2001]

3. Tutoring. Recommendation: All low-income students should have access to tutoring support at all grade levels.

Having focused assistance in the effort to absorb information and concepts is critical for children who may need help understanding words, may need to repeat procedures, and may need explanations that are specific to their own experience. There are a variety of tutoring models, but outcome analyses indicate that those with the longest-term improvements occur when the programs use teachers as tutors. [Slavin, 1992] A comprehensive analysis of one-to-one tutoring programs found that five programs in particular (Reading Recovery, Success for All, Prevention of Learning Disabilities, the Wallach Tutoring Program, and Programmed Tutorial Reading) produced substantial and prolonged improvement in reading scores. The effects were more positive than reducing class size or providing aides to the class. [Wasik and Slavin, 1993]

III. Staffing Requirements for Model Schools

Recommendation: Based on the resource needs elaborated above, these are the staffing requirements for model schools. These are the staffing levels used in the costing-out of adequacy developed in Chapter Five. Special education and English-as-a-Second-Language are not included, because they would be funded as needed based on student populations.

Elementary School (grades K4 through fifth grade):
[if 30% or more of students are eligible for free lunch, alternative levels are in brackets]

School Size:	350 students maximum 30 students total in half-day K4 [full day in high-poverty schools]
Class size:	20 [15] students maximum in K4 through third grade 22 students fourth and fifth grades
Staff:	19 classroom teachers [24] 1 permanent substitute teacher 5 teacher aides 3 specialty teachers (physical education, art, music) 3 education support personnel (remedial and gifted reading and mathematics, staff development, parental outreach) 2.5 pupil support/social services (guidance, social worker/psychologist, nurse) 2 library/media/technology specialists 1 principal 2 operations/maintenance 2 clericals

Middle School (sixth through eighth grades):

School Size:	500 students maximum
Class size:	25 students maximum
Staff:	28 classroom teachers 1 permanent substitute teacher 5 teacher aides 3 education support personnel (remedial and gifted, staff development, parental outreach) 4.5 pupil support/social services (guidance, social worker/psychologist, nurse) 3 library/media/technology specialists 1 principal 1 assistant principal 3 operations/maintenance 4 clericals

High School (ninth through twelfth grades):

School Size: 800 students maximum

Class size: 25 students maximum

Staff:
45 classroom teachers
8 teacher aides
3 education support personnel (remedial and gifted, staff development, parental outreach)
6 pupil support/social services (guidance, social worker/psychologist, nurse)
3 library/media/technology specialists
1 principal
2 assistant principals
4 operations/maintenance
5 clericals

Recommendation: These are staffing requirements for tutoring and enrichment programming for entire schools. Three figures are given for each job category – for elementary, middle, and high schools respectively.

Coordinator	1/1/1
Tutors	26/28/22
Enrichment specialist	1/2/3
Community service coordinator	1/1/2
Teacher	9/7/4
Maintenance	1/1/1

CHAPTER FIVE: COSTING-OUT RESOURCE STANDARDS

Methodology

"The devil is in the details."
-Popular saying

Since every school in Wisconsin is a unique entity that may currently be very close or very far from realizing this model state of Adequacy, it would be impossible to estimate how much, if any, additional funding a given school would need. Instead, this study estimates a foundation level of funds needed for each school district to finance all the recommended components of an adequate education. Costs are estimated on a per-student basis.

It is especially important to take the resulting numbers as estimates only. They are meant to illustrate how Adequacy works, not provide numbers to be relied upon literally. What is most important is the kind of analysis from which they were derived.

To create this cost-out, IWF retained the services of Richard Rothstein, a school-finance specialist with the Economic Policy Institute in Washington, D.C. Rothstein is the author of several books on education and school finance and a weekly education column in the New York Times. The methodology used was based on the approach he and James Guthrie, of Vanderbilt University, used in Wyoming, after that state's Supreme Court ordered an adequacy analysis.

The cost-out begins with the cost of resources in the school district of Omro, in Winnebago County. Rothstein selected Omro as a prototype because it is relatively close to the statewide medians in a number of basic measures. For example, total per-pupil spending in Omro was $9,088, compared with a state median of $8,812; enrollment was 1,253, compared with a state median of 999; 78% of Omro's third graders scored proficient or above on the state exam, compared with 82% statewide; the district included 99 square miles, identical to the state median. One significant difference: 7% of Omro students were eligible for free lunch, compared with 12% statewide. [All figures are for the 2000-'01 school year, and are based on data from the Department of Public Instruction.]

In applying Omro costs to other school districts, adjustments were made for estimated differences in regional costs, based on Wisconsin Department of Workforce Development data on average elementary and secondary teacher salaries by metropolitan area.

The analysis then determined what it would cost Omro to provide the resources for a model elementary, middle and high school. Since the costs of personnel are such a major item for schools, even

BEST COPY AVAILABLE

small changes in salary estimates can have a big impact on statewide cost estimates. This model uses the negotiated teacher salaries in Omro and gives them a weight based on the statewide average for years of experience and educational level of teachers.

Further adjustments were made for school districts that cover only a portion of kindergarten through twelfth grade. Costs were revised upward for districts going only through eighth grade, because the lowest class sizes are in elementary schools. By contrast, the average per-pupil cost was adjusted downward for unified high school districts, which will not incur the higher costs of smaller elementary classes. Most districts in Wisconsin are, like Omro, kindergarten through twelfth grade, and thus need no such adjustment.

The Omro prototype also was used to estimate each district's personnel supplies and equipment, administrative, and operations overhead. To support a higher level of after-school participation, Omro's per-pupil co-curricular high school payments (for coaches and teachers handling extra-curricular activities) were doubled. Middle schools were given co-curricular spending at half the rate of high schools.

The cost of computers was amortized so that districts could purchase computers immediately. Also, the model includes costs for a technology specialist to repair and maintain the network of computers at the middle school and high school levels, and a keyboarding aide to help teach elementary students how to use computers.

The model also underwrites smaller schools or "schools within schools" by providing enough funding for a principal for every 800 high school students, meaning a school of 2,400 students could be split into three. In keeping with this study's other recommendations, the cost estimate provides for enough teachers to create smaller class sizes, foreign language instruction (with one teacher at elementary level and two teachers for middle schools) and both art and music teachers for all three levels of schooling. The budgeting for staff development, by using part-time aides to release time for teacher training, saves money by paying the lower per-hour cost of aides for hall monitors and other duties.

This model averages out the benefits package for each category of workers: teachers, counselors, library assistants, part-time aides, etc. based on the Omro prototype. Applying these costs to a given school district may introduce inaccuracies, depending on how closely the distribution of married teachers, single teachers and teachers with dependents matches the distribution in Omro. Pension costs are included in the average benefits package and assume the common practice whereby school districts (as in Omro) contribute both the employer and employee portion of payments to the teacher's retirement plan.

Calculations were based on Omro budgets for the 1998-'99 school year, so all figures were raised to approximate inflation in the following two years. The result, then, are cost estimates comparable for the 2000-'01 school year.

The model also takes account of special needs for rural schools and schools with students in poverty.

For rural areas, the model reflects the smaller average size of middle and high schools (300 students in middle schools and 400 students in high schools), which makes them less cost-effective (for instance, the costs of a principal are spread over a smaller student body). In addition, rural schools typically have higher transportation costs; a special need for technology that can make distance-learning feasible, providing instruction in subjects that the districts cannot offer because of their small size; and greater difficulty in attracting teachers because of their location and generally lower wages.

For students in poverty, the model reflects the need for all-day 4-year-old kindergarten, additional staffing for remedial instruction, an extensive tutoring and enrichment program, and summer school.

In addition, the model adjusts for differences in per-pupil spending based on whether a district serves all grades, K-12, whether it is a unified high school district serving only grades 9-12, or a K-8 district only. High school only districts have lower per-pupil costs mostly because class sizes are slightly larger; correspondingly, districts serving only lower grades have high per-pupil costs. Based on differences in staff sizes, unified high school districts are assigned per-pupil costs at 92.6% that of K-12 districtrs, elementary districts at 103.2%.

Foundation Plans

So-called "foundation plans" for distributing school funds are in use in more than 40 states, though not in Wisconsin. A major advantage of a foundation system is its relative simplicity, both in administering it and understanding it. A foundation system has previously been proposed for Wisconsin. State Sen. Mike Ellis (R-Neenah), among others, did so in the 1990s, as did members of the Governor's Blue-Ribbon Commission on State-Local Partnerships for the 21st Century (known as the Kettl Commission) in 2000.

A foundation plan works by setting a specific per-pupil dollar amount that is guaranteed to school districts. In its purest, simplest form, that's all there is. If the foundation level is set at, for example, $8,000 per student, then the state guarantees every school district $8,000 per student.

This description of the basic concept of a foundation plan is focused exclusively on the spending, or distribution side, rather than on the taxation, or fund-raising side. In a common situation, school districts are expected to raise some funds by using local property taxes. In such a case, then, under a foundation plan the state would contribute the difference between what is raised locally through the property tax, and the foundation amount. For example, if a local tax raises the equivalent of $3,000 per student, and the foundation amount is $8,000, then the state would contribute $5,000 per student.

This differs radically from the current Wisconsin system, in which districts are allowed to spend an aggregate amount (not a per-pupil amount, as in a foundation system) that is based primarily on pupil

BEST COPY AVAILABLE

count and on the level of spending the previous year. In the current system, then, district-to-district variations based on local property wealth, based on local political decisions, or based on historical tradition, are generally preserved by the system, because it bases one year's spending on the previous year's. In a foundation system, by contrast, the state's guarantee of available school funds is one that is consistent statewide, regardless of such local variation.

Foundation plans have been used in the U.S. since the 1920s. They have not been very successful, however, in meeting Adequacy requirements. For one thing, "no real methodology was used to determine what the foundation amount should be. Instead, legislatures tended to establish the foundation based on the amount of funding they were willing to allocate for educational services with little regard for actual needs." [Campaign for Fiscal Equity, 2001]

Indeed, "Problems associated with the way foundation programs were implemented led to the school finance litigation that was so pervasive in the last 30 years. For example, foundation levels were typically very low in comparison to actual spending levels, property valuation was not determined uniformly, districts were not actually required to make the property tax effort used in calculating state aid, and a large share of state aid was distributed outside of the foundation program." [Augenblick, 2000]

What is new and distinctive about the Adequacy approach to using a foundation plan is that the determination of the foundation amount is rooted in substantive calculations based on the resources actually needed to reach meaningful educational objectives. An Adequacy-based foundation level is what Augenblick calls "rational," Rebell calls "true," and Guthrie and Rothstein call "sufficient."

Thus, Augenblick says that in an Adequacy system, "the levels of funding must be able to be defended as being *rational* – they must have some relationship to the costs of the programmatic needs of schools or to the costs associated with achieving certain levels of pupil performance." [Augenblick, 2000, italics added]

Rebell says, "The significance of the costing-out approach is that it determines a *true* foundation amount by identifying the specific resources and conditions necessary to provide all children a reasonable educational opportunity and then systematically calculates the amounts necessary to fund each of these prerequisites." [Campaign for Fiscal Equity, 2001, italics added]

And Guthrie and Rothstein write: "The more modern and still evolving concept of adequacy suggests that something beyond equity is at issue. The 'something else' is a notion of *sufficiency*, a per-pupil resource amount *sufficient* to achieve some performance objection." [Guthrie and Rothstein, 2001, italics added]

A simple foundation plan, as described so far, would not be a very realistic or useful way of distributing school funding. The reason is that it ignores critically important variables in school district needs. Thus,

the simple foundation system makes no allowance at all for the fact that some districts have large numbers of students in poverty, for example, while others may have large numbers of students with disabilities.

"In most cases, the formulas that allocate state funds to local school districts fail to recognize that the amount of money needed to provide students with an adequate education is not the same in each school district," wrote Reschovsky and Imazeki. "The minimum amount of money necessary to meet any given educational standard will vary across school district for reasons *outside the control of local school officials*. [Reschovsky and Imazeki, 2001, italics in original]

A sophisticated foundation plan, then, adjusts the foundation level to take into account other important educationally relevant variables, such as the number of students in a district with special educational needs. There are various ways to do this.

One method is to provide separate pools of money for various special needs, and make these available to school districts by some formula. These are commonly referred to as categorical funds.

Another method is to adjust each district's pupil count based on certain characteristics of students. For example, students with limited-English proficiency might be counted as the equivalent of 1.2 "ordinary" students. In this way, a district with a relatively large proportion of such students would have an artificially inflated student count, thus increasing their level of funding on a foundation, per-pupil basis. The same method could be used for other special-need students, such as those with disabilities or those from poverty households.

A third method is to establish subsidiary foundation amounts for certain student categories. For example, if the regular foundation amount were $8,000 per student, the foundation amount for a student with limited-English proficiency might be set at $10,000.

Many other adjustments can be added to a foundation plan. But the basic feature of all of them is that the core figure used to calculate the funds available to a school district is based on a set per-pupil amount.

Setting a Foundation Level

Estimates for various spending categories have been calculated, based on the resource standards, costing-out methodology, and the foundation approach to distributing funds outlined earlier. It must be emphasized that these are estimates only, because the calculations required many assumptions. To stress that these are estimates, all figures have been rounded to the nearest hundred.

In these figures, spending for capital investments have been separated off. Many states treat school capital expenditures – mostly for new buildings, but also for some other long-lasting heavy equipment – in a separate way from operating expenses. Wisconsin similarly handles the accounting for some of its state functions by establishing separate funds for operating and for capital expenses. Schools in

BEST COPY AVAILABLE

Wisconsin, however, have traditionally been analyzed financially by combining annual expenses on long-term capital debt as one more operational expense, along with such things as salaries, utilities, and purchases of disposable material. Because capital spending in this report has been segregated into a separate category, it is not included in any of the figures given below. Nor is it included in any comparisons with current spending levels.

All figures are based on fiscal year 2000-'01, the latest year for which financial data are available.

Also separated out are spending on special education and students with limited English proficiency. They were separated to make comparisons with current spending more meaningful, since both are handled as separate categories in the adequacy model being proposed.

After removing expenses for capital spending, special education, and limited English proficiency, the per-pupil average in Wisconsin, for 2000-'01, was $7,300, rounded to the nearest hundred.

Basic foundation:
IWF estimates a basic per-pupil foundation amount of $8,500.

This amount includes the following elements:

- Schools with a maximum of 350 students for elementary school, 500 for middle schools, and 600-1,000 maximum for high schools;
- Classes with a maximum of 15 students for kindergarten through third grade in schools where at least 30% of the students are eligible for free lunch, and 20 students otherwise; a maximum of 22 students for fourth and fifth grades; and a maximum of 25 students in sixth grade and above;
- Increased staffing to accommodate the need for teachers to have the equivalent of one class period per day free for professional education and development, plus a development coordinator;
- Increased staffing needed to offer a broader curriculum;
- Doubling current average expenditures on extra-curricular activities;
- A 5% across-the-board catch-up raise for all teachers;
- Additional amounts to handle the acquisition and maintenance of computers and other technology.

Foundation for rural schools
Rural schools need additional funds. They suffer from inefficiencies of scale (administrative costs will be relatively higher, because even a very small rural school still needs a principal); from higher transportation costs; from a need for incentives to attract teachers ($3,000 annual incentives); and from a need for additional technology to take advantage of distance-learning opportunities, critical for providing a broad curriculum. IWF estimates that these rural school districts need an additional $700 per student.

Foundation for special education and students with limited English
School expenditures for special education and limited English proficiency programs should be fully reimbursed. There is no reason to require a school district to pay extra costs to educate these children and to have to take the additional amounts from their regular operational funds.

In Wisconsin, 12% of the state's public-school students were classified as needing special education in 2000-'01. Based on actual Wisconsin costs in 2000-'01, IWF estimates that the average additional cost for each special-education student was $8,500.

For English proficiency programs, the state currently does not reimburse districts for any costs if a certain threshold number of non-English speakers is not present. These thresholds are ten or more students within a single language group, in kindergarten through third grade; and twenty or more students within a single language group, in fourth through twelfth grade. Students with limited English proficiency need special programs, regardless of whether they are among a group of at least ten - or twenty - similar students in a particular district. Therefore, IWF follows the recommendation of the state's Department of Public Instruction in expanding state financial support to include all students in need of English proficiency. [Benson, 2001]

Based on actual Wisconsin costs in 2000-'01, and Department of Public Instruction estimates of how many additional students would be covered if the thresholds were eliminated, IWF estimated that the average additional cost for each limited-English proficiency student is $2,300.

Foundation for students from low-income households
Schools with students from low-income households also need additional funds. An important decision, however, is whether the additional resources should be applied for individual students who qualify based on their household income, or whether entire schools should be granted additional funds based on their having a certain minimum threshold of students from poor households. The model developed here provides funding based on each district's population of students from low-income households, rather than only for schools with concentrated poverty. The issue deserves extended discussion, however.

A study by the National Center for Education Statistics reports that standardized test score composites began to decline when a school's concentration of students eligible for free or for reduced-price lunch exceeds 5%. This decline is steady and consistent across locations: urban, rural, or suburban. [Lippman, Burns, and McArthur, 1996] Other researchers have corroborated the effects on achievement of poverty concentration, as distinct from poverty alone. [Kennedy, Jung and Orland, 1986; Abt Associates, 1993; Pelavin and Kane, 1990; Anderson et al, 1992; Jencks and Mayer, 1990]

Furthermore, the evidence cited earlier suggests that school poverty concentration introduces risk to all students over and above individual level risk. It is true that students with individual-level risk exposure are more susceptible to the negative effects of attending schools with high concentrations of poverty, but

research indicates that all students, in all locations, who attend high-poverty schools are exposed to risk induced by the concentration of poverty within the school. This would suggest that resources for children from low-income households should be concentrated in schools where such children are concentrated, rather than being distributed to any district based on its population of such children.

For purposes of costing out resources for students in poverty, then, we have assumed that tutoring programs and summer schools would be available to all students in a subset of Wisconsin schools, those exceeding a threshold concentration of poverty. The cost of summer school and tutoring programs was calculated on this basis.

At what point, however, is a school deemed to have enough concentrated poverty to justify the additional resources? Setting the threshold is a difficult, and largely arbitrary matter. If, for example, we establish the cut-off point as 40 % of students in poverty, clearly a school where 39 % of students are poor is little different from a school where 41% of students are poor. The research is not at all clear in suggesting a clear-cut threshold point.

There are other practical problems in following this strategy, however, in addition to the threshold issue. One is the simple fact that it leaves schools below the threshold with no additional resources for low-income students.

It may be that if the resources outlined above were implemented, they would go a long way toward addressing the problems particular to poor students in schools without concentrations of students in poverty. Relatively small classes might allow teachers to offer more individualized instruction. Counselors should have the ability to refer at-risk students to needed medical, psychological, and social services, if the concentration of these students is not high. Still, it seems appropriate to provide some additional resources for schools with low-income students, even if they lack intense concentrations of poor children.

A second problem is more of a political nature. Poverty is dispersed throughout Wisconsin, but highly concentrated poverty is found in only a small number of districts. Restricting special resources only for places with highly concentrated poverty, then, shuts out almost every district from the possibility of such additional assistance.

Furthermore, the Adequacy model developed here honors the demands of local control, in that funds are distributed as a form of block grant to districts, allowing districts to make their own decisions about how best to use the money. In other words, even though the calculations for determining a certain level of funding are based on specific program needs, it is not intended that districts spend the money on exactly that mix of programs. Thus, a district with high-poverty schools might not choose to use additional resources exactly for teacher incentives, tutoring, and summer school.

BEST COPY AVAILABLE

For these reasons, IWF proposes allotting special resources for students from low-income households based on the population of such children in each district, rather than only to schools with concentrations of poverty. This will both provide substantial additional aid to districts with high-poverty enrollments, and also generate some additional aid for other districts with lesser concentrations of students in poverty.

The traditional method used nationwide to count low-income students is to use the number of students ruled eligible for free meals, or alternatively, eligible for free or for reduced-fee lunch. The federal threshold for free-meal eligibility is a household income of no more than 135% of the poverty line; for reduced meal no more than 185% of poverty. The amount varies depending on household size, and also from one metropolitan area to another.

For purposes of costing-out resources for students in poverty, IWF used as a basis the fact that 18.5% of Wisconsin public school district students were eligible for free lunch in the 2000-'01 school year, according to the State Department of Public Instruction.

If funds are awarded to districts based on their population of students eligible for free meals, IWF estimates that each such student would require an additional $3,200.

Also, amounts are adjusted both to reflect regional wage differences and differences among K-12, K-8, and unified high school districts. Finally, it is assumed that all figures will be adjusted annually for inflation.

Foundation summary

To summarize:

- School districts would receive $8,500 per student.
- Rural districts would receive an additional $700 per student.
- All districts would receive $3,200 for each student eligible for free lunch.
- Districts would be reimbursed fully for spending on special education programming and limited English proficiency programming, based on actual expenditures rather than a fixed per-student amount.

Again, these figures do not include capital expenditures, which amounted to approximately $620 per student in 2000-'01.

Special supplement

In examining the calculated foundation totals for each school district, however, it is clear that two additional adjustments are required: one for the smallest rural districts, and the other for all districts in the state. In both cases, these adjustments are necessary because it is much more likely that only partial Adequacy funding will be implemented than full Adequacy, for political and fiscal reasons.

Because they operate with such severe diseconomies of scale, the smallest rural districts already have relatively high per-pupil costs. In many cases their current spending is remarkably close to their calculated

Adequacy levels, despite the fact that their students lack many programs and resources accepted as routine elsewhere. For this reason, a special supplement was deemed appropriate for the 164 rural districts with less than 1,000 students. These small rural districts need the additional funds immediately. However, if Adequacy were to be only partially implemented, many of these districts might not get additional funding, because their current spending is at a high ratio to full Adequacy. Under this model, these very small districts are ensured an annual cash supplement, regardless of the level of Adequacy that might be initially enacted.

The supplement for small rural districts declines on a per-student basis as district size increases. It ranges from $1,000 per student for a (theoretical) district with 1 student, to $1 per student for a district with 999 students. The consequence of this method is that the total supplement value first increases as district size increases, then begins decreasing as enrollment approaches 1,000. The result is only a small difference between the final district receiving a supplement (a district with 999 students) and the first district not receiving one (a district with 1,000 students). District totals range from $999, for districts with 999 students, to $249,919, for a district of 491 students.

In addition, every district needs additional funding to be able to implement some of the changes recommended in this report. The recent sharp increases in health insurance costs have caused all districts considerable financial hardship under the QEO law. Thus, staff salaries are used as the basis for determining this additional adjustment. Each district is granted an annual supplement based on 3.5% of the average statewide teacher wage, adjusted for regional wage variations. The resulting adjustments range from a low of $7,451 to a high of $12,630,431, or approximately $120 per student.

District adequacy estimates

The following table provides estimates of Adequacy funding for each school district in Wisconsin for the 2000-'01 school year, and compares that figure with actual funding that year. Calculations were based on data from the Wisconsin Department of Public Instruction.

It is critical to take into account that these are estimates only, and are meant to illustrate how Adequacy would work, not provide numbers to be relied on literally. What is most imporant is the kind of analysis from which they were derived. The exact numbers themselves, however, must be understood to have margins of error.

Exact numbers for individual school districts will differ, based on —among other factors—more up-to-date and accurate data on enrollment, on populations of special-needs students (students with disabilities, students with limited English, student eligible for free lunch), and on comparative wage rates for teaching staff.

BEST COPY AVAILABLE

ADEQUACY ALLOCATIONS
(All figures are for 2000-'01 school year)

1. Foundation amounts are per pupil.
2. Allocations for free-lunch, special-education, and limited-English students are averaged across total enrollment.
3. Adequacy amounts are adjusted for regional wage differences and district status as K-12, K-8, or 9-12.
4. If actual spending exceeds Adequacy level, district will be held harmless, with no loss.
5. Annual supplement includes special small-rural adjustment, for rural districts with less than 1,000 students.

School District	Number of students	Basic foundation	Rural foundation	Poverty foundation	Special Education	Limited English	Total Adequacy	Actual spending	Actual as % of Adequacy	80% of Adequacy	Special Supplement
Abbotsford	659	$8,730	$719	$618	$24	$77	$10,168	$7,365	72%	$8,134	$363,243
Adams-Friendship Area	2,107	$8,730	$719	$1,203	$1,024	$5	$11,680	$8,372	72%	$9,344	$241,532
Albany	457	$8,730	$719	$216	$1,116	$0	$10,780	$8,945	83%	$8,624	$279,487
Algoma	731	$8,730	$719	$360	$1,124	$0	$10,932	$7,732	71%	$8,746	$393,097
Alma	397	$8,730	$719	$356	$542	$0	$10,347	$8,084	78%	$8,277	$254,609
Alma Center	591	$8,730	$719	$745	$798	$47	$11,038	$8,228	75%	$8,831	$335,048
Almond-Bancroft	532	$8,730	$719	$587	$497	$61	$10,593	$7,506	71%	$8,475	$310,585
Altoona	1,407	$8,769	$0	$501	$23	$31	$9,343	$7,874	84%	$7,475	$162,388
Amery	1,935	$8,730	$719	$474	$767	$4	$10,693	$7,366	69%	$8,554	$221,815
Antigo	3,029	$8,730	$719	$716	$1,262	$0	$11,427	$9,099	80%	$9,142	$347,224
Appleton Area	14,719	$8,500	$0	$407	$1,017	$166	$10,090	$7,488	74%	$8,072	$1,642,926
Arcadia	890	$8,730	$719	$417	$833	$0	$10,698	$8,474	79%	$8,559	$459,023
Argyle	375	$8,730	$719	$333	$456	$0	$10,237	$7,902	77%	$8,190	$245,487
Arrowhead UHS	1,976	$9,571	$0	$0	$1,561	$0	$11,132	$8,492	76%	$8,906	$248,350
Ashland	2,293	$8,730	$0	$987	$1,008	$0	$10,725	$8,879	83%	$8,580	$262,854
Ashwaubenon	3,231	$9,129	$0	$177	$883	$4	$10,192	$8,157	80%	$8,154	$387,330
Athens	554	$9,512	$783	$666	$16	$0	$10,977	$8,716	79%	$8,782	$325,396
Auburndale	910	$8,730	$719	$527	$931	$0	$10,907	$7,422	68%	$8,726	$467,316
Augusta	689	$8,709	$724	$797	$46	$0	$10,356	$8,484	82%	$8,286	$376,221
Baldwin-Woodville Area	1,348	$9,044	$745	$296	$861	$5	$10,950	$7,717	70%	$8,760	$180,093
Bangor	707	$8,891	$732	$469	$823	$0	$10,915	$7,210	66%	$8,732	$384,645
Baraboo	2,982	$8,730	$0	$330	$977	$0	$10,036	$7,444	74%	$8,029	$341,836
Barneveld	431	$8,730	$719	$221	$976	$0	$10,646	$9,286	87%	$8,517	$268,707
Barron Area	1,583	$8,730	$719	$633	$502	$0	$10,584	$7,987	75%	$8,467	$181,464
Bayfield	559	$8,730	$719	$1,482	$874	$0	$11,803	$11,676	99%	$9,443	$321,780
Beaver Dam	3,427	$8,730	$0	$365	$1,063	$19	$10,176	$8,113	80%	$8,141	$392,848

BEST COPY AVAILABLE

School District	Number of students	Basic foundation	Rural foundation	Poverty foundation	Special Education	Limited English	Total Adequacy	Actual spending	Actual as % of Adequacy	60% of Adequacy	Special Supplement
Beecher-Dunbar-Pembine	332	$8,730	$719	$940	$687	$0	$11,075	$10,714	97%	$8,860	$227,658
Belleville	895	$8,577	$706	$148	$1,225	$0	$10,656	$8,525	80%	$8,524	$459,298
Belmont Community	392	$8,730	$719	$268	$443	$0	$10,160	$8,237	81%	$8,128	$252,536
Beloit	6,751	$8,534	$0	$1,100	$1,597	$75	$11,306	$8,799	78%	$9,045	$756,557
Beloit Turner	1,046	$8,534	$0	$243	$1,241	$2	$10,020	$8,233	82%	$8,016	$117,221
Benton	298	$8,730	$719	$320	$473	$0	$10,242	$8,644	84%	$8,193	$213,561
Berlin Area	1,764	$8,730	$719	$404	$474	$81	$10,407	$7,435	71%	$8,326	$202,213
Big Foot UHS	497	$8,730	$719	$317	$549	$19	$10,334	$9,353	91%	$8,267	$56,973
Birchwood	327	$8,730	$719	$643	$879	$0	$10,971	$9,572	87%	$8,777	$225,585
Black Hawk	609	$8,730	$719	$324	$721	$0	$10,493	$8,918	85%	$8,395	$342,512
Black River Falls	1,933	$8,730	$719	$780	$883	$0	$11,112	$7,629	69%	$8,889	$221,586
Blair-Taylor	741	$8,730	$719	$568	$932	$0	$10,948	$7,708	70%	$8,759	$397,243
Bloomer	1,151	$8,789	$724	$351	$53	$0	$9,916	$8,569	86%	$7,933	$132,842
Bonduel	937	$8,730	$719	$488	$762	$0	$10,697	$7,842	73%	$8,558	$478,511
Boscobel Area	1,008	$8,730	$719	$786	$855	$5	$11,094	$8,009	72%	$8,875	$115,550
Boulder Junction J1	239	$9,007	$742	$667	$702	$0	$11,118	$11,570	104%	$8,894	$189,097
Bowler	583	$8,730	$719	$941	$1,142	$0	$11,532	$8,688	75%	$9,226	$331,731
Boyceville Community	939	$8,730	$719	$707	$820	$0	$10,975	$8,377	76%	$8,780	$479,340
Brighton #1	160	$8,850	$0	$125	$660	$0	$9,635	$8,441	88%	$7,708	$18,020
Brillion	883	$8,500	$0	$199	$456	$0	$9,155	$7,268	79%	$7,324	$453,460
Bristol #1	529	$8,850	$0	$139	$442	$0	$9,430	$7,642	81%	$7,544	$59,578
Brodhead	1,238	$8,730	$719	$329	$993	$0	$10,770	$7,506	70%	$8,616	$141,916
Brown Deer	1,516	$9,571	$0	$345	$786	$77	$10,779	$9,662	90%	$8,623	$190,536
Bruce	661	$8,730	$719	$1,039	$14	$0	$10,501	$8,606	82%	$8,401	$364,072
Burlington Area	3,516	$9,257	$0	$426	$8	$30	$9,720	$6,662	69%	$7,776	$427,382
Butternut	224	$8,730	$719	$675	$1,187	$0	$11,310	$10,535	93%	$9,048	$182,878
Cadott Community	947	$8,789	$724	$566	$21	$0	$10,100	$7,460	74%	$8,080	$483,397
Cambria-Friesland	465	$8,730	$719	$466	$676	$15	$10,606	$8,272	78%	$8,485	$282,804
Cambridge	1,021	$8,577	$0	$133	$1,164	$0	$9,873	$8,459	86%	$7,899	$114,989
Cameron	845	$8,730	$719	$564	$420	$0	$10,433	$7,930	76%	$8,346	$440,365
Campbellsport	1,511	$8,730	$719	$122	$729	$0	$10,299	$7,218	70%	$8,239	$173,211
Cashton	576	$8,730	$719	$787	$594	$0	$10,830	$8,136	75%	$8,664	$328,829
Cassville	360	$8,730	$719	$493	$585	$0	$10,527	$8,843	84%	$8,421	$239,268
Cedar Grove-Belgium Area	960	$9,002	$0	$141	$670	$0	$9,812	$7,725	79%	$7,850	$491,477
Cedarburg	2,820	$9,571	$0	$29	$945	$5	$10,551	$8,285	79%	$8,440	$354,427
Central/Westosha UHS	1,094	$8,577	$0	$0	$435	$8	$9,020	$8,026	89%	$7,216	$123,211
Chetek	1,119	$8,730	$719	$649	$493	$0	$10,590	$7,415	70%	$8,472	$128,274
Chilton	1,348	$8,500	$0	$264	$125	$0	$8,889	$6,988	79%	$7,111	$150,463
Chippewa Falls Area	4,496	$8,789	$0	$439	$828	$20	$10,077	$7,589	75%	$8,061	$518,903
Clayton	383	$8,730	$719	$772	$512	$0	$10,733	$8,366	78%	$8,586	$248,804
Clear Lake	721	$8,730	$719	$451	$639	$3	$10,542	$7,921	75%	$8,433	$388,950

BEST COPY AVAILABLE

School District	Number of students	Basic foundation	Rural foundation	Poverty foundation	Special Education	Limited English	Total Adequacy	Actual spending	Actual as % of Adequacy	80% of Adequacy	Special Supplement
Clinton Community	1,181	$8,534	$0	$229	$1,355	$0	$10,118	$8,324	82%	$8,094	$132,350
Clintonville	1,671	$8,730	$0	$639	$1,019	$25	$10,413	$8,059	77%	$8,330	$191,552
Cochrane-Fountain City	759	$8,730	$719	$281	$738	$0	$10,467	$8,243	79%	$8,374	$404,707
Colby	1,144	$8,730	$719	$488	$1,086	$0	$11,023	$8,255	75%	$8,818	$131,140
Coleman	782	$8,730	$719	$521	$859	$0	$10,829	$8,019	74%	$8,663	$414,243
Coltax	890	$8,730	$719	$480	$751	$0	$10,679	$6,551	61%	$8,544	$459,023
Columbus	1,247	$8,730	$719	$274	$638	$0	$10,361	$7,853	76%	$8,289	$142,947
Comell	582	$8,789	$724	$961	$43	$0	$10,517	$8,786	84%	$8,413	$331,771
Crandon	1,095	$8,730	$719	$1,038	$871	$0	$11,358	$8,086	71%	$9,086	$125,523
Crivitz	878	$8,730	$719	$670	$724	$0	$10,842	$8,272	76%	$8,674	$454,048
Cuba City	769	$8,730	$719	$261	$725	$0	$10,434	$8,606	82%	$8,348	$408,853
Cudahy	2,781	$9,571	$0	$833	$1,208	$103	$11,715	$8,821	75%	$9,372	$349,526
Cumberland	1,268	$8,730	$719	$490	$630	$0	$10,568	$7,344	69%	$8,454	$145,355
D C Everest Area	5,101	$9,512	$0	$477	$793	$119	$10,902	$7,393	68%	$8,721	$637,126
Darlington Community	903	$8,730	$719	$207	$744	$0	$10,400	$7,515	72%	$8,320	$464,414
Deerfield Community	789	$8,577	$0	$303	$1,056	$0	$9,936	$9,256	93%	$7,948	$415,560
Delorest Area	2,992	$8,577	$0	$155	$1,168	$27	$9,927	$8,500	86%	$7,942	$336,971
Delavan-Darien	2,654	$8,730	$0	$687	$204	$243	$9,863	$6,883	70%	$7,891	$304,236
Denmark	1,615	$9,129	$752	$145	$686	$0	$10,712	$7,162	67%	$8,569	$193,605
Depere	2,822	$9,129	$0	$173	$484	$0	$9,786	$6,669	68%	$7,829	$338,299
Desoto Area	620	$8,730	$719	$594	$842	$0	$10,884	$8,981	83%	$8,707	$347,073
Dodgeland	812	$8,730	$719	$376	$1,458	$0	$11,282	$9,551	85%	$9,026	$426,582
Dodgeville	1,258	$9,007	$742	$315	$1,207	$0	$11,272	$8,568	76%	$9,018	$144,208
Dover #1	79	$9,257	$0	$0	$0	$87	$9,344	$8,345	89%	$7,475	$9,603
Drummond	577	$8,730	$719	$974	$530	$0	$10,953	$8,574	78%	$8,762	$329,243
Durand	1,250	$8,730	$719	$484	$1,404	$0	$11,336	$8,640	76%	$9,069	$143,291
East Troy Community	1,707	$8,730	$0	$110	$201	$0	$9,041	$7,297	81%	$7,233	$195,679
Eau Claire Area	11,073	$8,789	$0	$643	$1,147	$113	$10,691	$8,535	80%	$8,553	$1,277,984
Edgar	653	$9,512	$783	$274	$33	$0	$10,602	$7,583	72%	$8,482	$367,461
Edgerton	1,860	$8,534	$0	$252	$1,551	$6	$10,343	$8,382	81%	$8,275	$208,443
Elcho	436	$8,730	$719	$852	$1,249	$0	$11,549	$8,948	77%	$9,239	$270,780
Eleva-Strum	691	$8,730	$719	$442	$43	$0	$9,934	$8,122	82%	$7,947	$376,511
Elk Mound Area	808	$8,730	$719	$334	$1,023	$0	$10,805	$7,687	71%	$8,644	$425,024
Elkhart Lake-Glenbeulah	591	$9,002	$741	$0	$965	$0	$10,708	$9,051	85%	$8,566	$337,159
Elkhorn Area	2,566	$8,730	$0	$193	$171	$66	$9,161	$6,772	74%	$7,328	$294,149
Ellsworth Community	1,882	$8,730	$719	$232	$1,035	$0	$10,716	$7,820	73%	$8,573	$215,740
Elmbrook	6,840	$9,571	$0	$146	$1,671	$44	$11,432	$9,626	84%	$9,146	$859,675
Elmwood	428	$8,730	$719	$522	$654	$0	$10,624	$8,395	79%	$8,499	$267,463
Erin	334	$9,876	$0	$45	$958	$0	$10,878	$7,993	73%	$8,703	$232,178
Evansville Community	1,513	$8,534	$0	$212	$917	$0	$9,663	$7,544	78%	$7,731	$169,556
Fall Creek	871	$8,789	$724	$384	$48	$0	$9,944	$8,226	83%	$7,955	$451,826

School District	Number of students	Basic foundation	Rural foundation	Poverty foundation	Special Education	Limited English	Total Adequacy	Actual spending	Actual as % of Adequacy	80% of Adequacy	Special Supplement
Fall River	428	$8,730	$719	$184	$699	$0	$10,331	$8,456	82%	$8,265	$267,463
Fennimore Community	858	$8,730	$719	$433	$743	$0	$10,625	$7,389	70%	$8,500	$445,755
Flambeau	712	$9,007	$742	$1,072	$65	$0	$10,886	$9,128	84%	$8,709	$385,219
Florence	872	$8,730	$719	$912	$620	$0	$10,980	$8,697	79%	$8,784	$451,560
Fond du Lac	7,013	$8,730	$0	$496	$1,124	$87	$10,436	$7,596	73%	$8,348	$803,922
Fontana J8	267	$9,007	$0	$203	$67	$52	$9,329	$9,317	100%	$7,463	$200,707
Fort Atkinson	2,742	$8,730	$0	$217	$892	$81	$9,920	$8,049	81%	$7,936	$314,324
Fox Point J2	683	$9,876	$0	$223	$1,876	$17	$11,991	$11,052	92%	$9,593	$85,842
Franklin Public	3,537	$9,876	$0	$343	$1,326	$89	$11,634	$9,086	78%	$9,307	$444,542
Frederic	627	$8,730	$719	$697	$452	$0	$10,597	$8,504	80%	$8,478	$349,975
Freedom Area	1,456	$8,500	$0	$163	$1,059	$0	$9,721	$7,651	79%	$7,777	$162,518
Friess Lake	227	$8,500	$0	$0	$622	$0	$9,122	$8,721	96%	$7,298	$183,438
Galesville-Ettrick	1,477	$8,730	$719	$327	$754	$0	$10,529	$7,194	68%	$8,424	$169,313
Geneva J4	110	$8,730	$0	$0	$0	$42	$8,771	$9,831	112%	$7,017	$12,610
Genoa City J2	569	$8,730	$0	$0	$48	$16	$8,793	$6,237	71%	$7,035	$325,926
Germantown	3,532	$9,876	$0	$107	$1,169	$10	$11,162	$8,570	77%	$8,930	$443,914
Gibraltar Area	675	$9,007	$742	$161	$1,324	$0	$11,234	$11,139	99%	$8,987	$369,877
Gilett	839	$8,730	$719	$407	$84	$0	$9,940	$7,492	75%	$7,952	$437,877
Gilman	564	$8,730	$719	$1,177	$35	$0	$10,661	$8,556	80%	$8,528	$323,853
Gilmanton	256	$8,730	$719	$886	$0	$0	$10,334	$8,573	83%	$8,267	$196,146
Glendale-River Hills	979	$9,571	$0	$501	$1,290	$9	$11,371	$11,167	98%	$9,097	$105,580
Glenwood City	889	$9,044	$745	$417	$1,006	$32	$11,244	$8,102	72%	$8,995	$462,280
Gliddon	276	$8,063	$666	$1,312	$1,012	$0	$11,074	$9,561	86%	$8,859	$204,439
Goodman-Armstrong	236	$9,007	$742	$891	$352	$0	$10,992	$11,176	102%	$8,794	$187,853
Grafton	1,972	$9,571	$0	$69	$1,339	$2	$10,982	$8,728	79%	$8,785	$247,848
Granton Area	366	$8,730	$719	$647	$39	$0	$10,134	$8,937	88%	$8,107	$241,756
Grantsburg	934	$9,129	$719	$602	$696	$0	$10,746	$7,655	71%	$8,597	$502,145
Green Bay Area	19,465	$9,730	$0	$918	$1,543	$235	$11,825	$8,212	69%	$9,460	$2,333,449
Green Lake	380	$8,730	$719	$208	$513	$0	$10,169	$10,209	100%	$8,135	$247,561
Greendale	2,050	$9,571	$0	$214	$979	$25	$10,789	$9,700	90%	$8,632	$257,651
Greenfield	3,043	$9,571	$0	$539	$1,204	$56	$11,369	$8,241	72%	$9,096	$382,455
Greenwood	585	$8,730	$719	$595	$124	$0	$10,168	$8,299	82%	$8,134	$332,560
Hamilton	3,764	$9,571	$0	$138	$731	$4	$10,444	$7,980	76%	$8,355	$473,072
Hartford J1	1,522	$9,571	$0	$431	$1,489	$33	$11,524	$8,114	70%	$9,219	$191,290
Hartford UHS	1,715	$9,571	$0	$124	$683	$3	$10,381	$8,941	86%	$8,305	$215,547
Hartland-Lakeside J3	1,342	$9,571	$0	$107	$1,269	$0	$10,947	$8,405	77%	$8,758	$168,667
Hayward Community	1,930	$8,730	$719	$904	$1,039	$0	$11,382	$8,311	73%	$9,106	$221,242
Herman #22	101	$8,730	$719	$65	$55	$0	$9,569	$11,496	120%	$7,655	$131,878
Highland	369	$8,063	$666	$280	$580	$0	$9,610	$8,197	85%	$7,688	$243,000
Hilbert	536	$8,771	$722	$197	$398	$0	$10,088	$7,490	74%	$8,070	$310,628
Hillsboro	630	$8,063	$666	$594	$623	$0	$9,957	$7,063	71%	$7,965	$351,219

BEST COPY AVAILABLE

School District	Number of students	Basic foundation	Rural foundation	Poverty foundation	Special Education	Limited English	Total Adequacy	Actual spending	Actual as % of Adequacy	80% of Adequacy	Special Supplement
Holmen	3,040	$9,174	$0	$366	$963	$62	$10,565	$7,532	71%	$8,452	$354,932
Horicon	1,127	$8,730	$0	$321	$260	$4	$9,314	$8,087	87%	$7,451	$129,192
Hortonville	2,585	$8,500	$0	$119	$509	$48	$9,176	$7,004	76%	$7,340	$288,536
Howards Grove	981	$9,288	$0	$39	$647	$2	$9,976	$8,253	83%	$7,981	$500,259
Howard-Suamico	4,321	$9,129	$0	$149	$601	$6	$9,885	$7,075	72%	$7,908	$517,998
Hudson	4,250	$9,044	$0	$146	$995	$5	$10,190	$7,279	71%	$8,152	$504,743
Hurley	757	$8,730	$719	$755	$1,321	$0	$11,525	$9,388	81%	$9,220	$403,877
Hustisford	437	$8,730	$719	$226	$133	$0	$9,807	$9,005	92%	$7,846	$271,195
Independence	349	$8,730	$719	$443	$1,077	$0	$10,968	$9,752	89%	$8,774	$234,707
Iola-Scandinavia	826	$8,730	$719	$267	$430	$0	$10,145	$6,599	65%	$8,116	$432,487
Iowa-Grant	999	$8,730	$719	$451	$615	$0	$10,514	$8,533	81%	$8,411	$504,218
Ithaca	361	$8,730	$719	$428	$780	$0	$10,656	$7,918	74%	$8,525	$239,683
Janesville	10,867	$8,534	$0	$441	$1,241	$32	$10,248	$7,768	76%	$8,198	$1,217,820
Jefferson	1,805	$8,730	$0	$373	$1,316	$38	$10,457	$8,335	80%	$8,365	$206,913
Johnson Creek	620	$8,730	$0	$186	$1,252	$0	$10,167	$8,907	88%	$8,134	$347,073
Juda	314	$8,730	$719	$502	$623	$0	$10,574	$7,925	75%	$8,459	$220,195
Kaukauna Area	3,643	$8,500	$0	$216	$1,098	$89	$9,903	$8,410	85%	$7,922	$406,629
Kenosha	19,986	$8,577	$0	$694	$1,115	$54	$10,439	$8,357	80%	$8,351	$2,250,903
Kettle Moraine	4,364	$9,571	$0	$92	$903	$0	$10,566	$8,175	77%	$8,453	$548,482
Kewaskum	1,954	$9,571	$0	$109	$1,001	$0	$10,681	$7,614	71%	$8,545	$245,585
Kewaunee	1,144	$8,730	$719	$296	$940	$0	$10,684	$7,844	73%	$8,547	$131,140
Kickapoo Area	469	$8,730	$719	$785	$882	$0	$11,116	$9,493	85%	$8,892	$284,463
Kiel Area	1,527	$8,730	$0	$172	$272	$9	$9,183	$7,482	81%	$7,346	$175,045
Kimberly Area	2,965	$8,500	$0	$67	$912	$34	$9,513	$7,332	77%	$7,611	$330,951
Kohler	424	$9,002	$0	$0	$839	$0	$9,841	$9,322	95%	$7,873	$50,119
Lac Du Flambeau #1	511	$8,730	$719	$2,148	$1,888	$0	$13,485	$17,237	128%	$10,788	$301,878
Lacrosse	7,711	$8,891	$0	$893	$1,320	$197	$11,301	$9,042	80%	$9,041	$900,289
Ladysmith-Hawkins	1,164	$8,730	$719	$680	$76	$6	$10,211	$9,363	92%	$8,169	$133,433
Lake Country	321	$8,730	$719	$686	$989	$0	$11,124	$9,334	84%	$8,899	$223,097
Lake Geneva J1	498	$9,571	$0	$80	$0	$0	$9,651	$9,711	101%	$7,720	$301,990
Lake Geneva-Genoa UHS	1,703	$8,730	$0	$758	$323	$193	$10,004	$6,786	68%	$8,003	$195,220
Lake Holcombe	1,062	$8,730	$0	$254	$43	$56	$9,083	$9,634	106%	$7,266	$121,740
Lake Mills Area	490	$8,789	$724	$1,020	$53	$0	$10,585	$8,817	83%	$8,468	$293,553
Lakeland UHS	1,346	$8,730	$0	$227	$1,160	$39	$10,156	$8,478	83%	$8,125	$154,296
Lancaster Community	969	$8,083	$666	$188	$1,263	$0	$10,201	$10,823	106%	$8,161	$111,079
Laona	1,150	$9,007	$742	$383	$1,188	$0	$11,320	$8,361	74%	$9,056	$131,828
Lena	313	$8,730	$719	$903	$523	$0	$10,874	$9,838	90%	$8,699	$219,780
Linn J4	482	$8,730	$719	$457	$1,335	$0	$11,240	$7,998	71%	$8,992	$289,853
Linn J6	65	$8,730	$719	$0	$46	$0	$9,495	$12,350	130%	$7,596	$7,451
Little Chute Area	102	$8,730	$719	$0	$92	$45	$9,585	$11,322	118%	$7,668	$11,693
	1,416	$8,500	$0	$273	$929	$0	$9,702	$7,312	75%	$7,762	$158,053

BEST COPY AVAILABLE

School District	Number of students	Basic foundation	Rural foundation	Poverty foundation	Special Education	Limited English	Total Adequacy	Actual spending	Actual as % of Adequacy	80% of Adequacy	Special Supplement
Lodi	1,593	$9,007	$742	$149	$817	$0	$10,715	$7,826	73%	$8,572	$182,611
Lomira	1,158	$9,007	$0	$155	$249	$0	$9,412	$7,722	82%	$7,530	$132,745
Loyal	690	$9,007	$742	$757	$70	$0	$10,576	$8,078	76%	$8,461	$376,097
Luck	665	$8,730	$719	$608	$630	$0	$10,686	$7,561	71%	$8,549	$365,731
Luxemburg-Casco	1,813	$8,730	$719	$98	$717	$1	$10,265	$7,324	71%	$8,212	$207,830
Madison Metropolitan	25,285	$8,577	$0	$734	$2,050	$177	$11,537	$9,931	86%	$9,230	$2,847,697
Manawa	962	$8,730	$719	$366	$834	$0	$10,648	$7,509	71%	$8,518	$488,877
Manitowoc	5,457	$8,730	$0	$0	$908	$166	$9,803	$7,371	75%	$7,843	$625,553
Maple	1,412	$8,602	$708	$647	$635	$0	$10,593	$7,361	69%	$8,474	$159,498
Maple Dale-Indian Hill	546	$9,571	$0	$132	$1,516	$88	$11,307	$12,512	111%	$9,046	$68,623
Marathon City	743	$9,512	$783	$87	$62	$0	$10,444	$7,130	68%	$8,355	$405,702
Marinette	2,567	$8,730	$0	$422	$1,023	$2	$10,176	$8,115	80%	$8,141	$294,263
Marion	647	$8,730	$719	$559	$494	$0	$10,501	$7,439	71%	$8,401	$358,268
Markesan	1,000	$8,730	$719	$335	$597	$0	$10,381	$8,306	80%	$8,305	$114,633
Marshall	1,211	$8,577	$0	$389	$1,149	$135	$10,250	$7,384	72%	$8,200	$136,388
Marshfield	4,118	$8,730	$0	$210	$1,104	$2	$10,045	$7,846	78%	$8,036	$472,059
Mauston	1,641	$8,730	$719	$805	$738	$28	$11,020	$7,673	70%	$8,816	$188,113
Mayville	1,332	$8,730	$0	$190	$1,089	$0	$10,008	$7,754	77%	$8,007	$152,691
Mcfarland	1,991	$8,577	$0	$75	$951	$23	$9,625	$7,778	81%	$7,700	$224,234
Medford Area	2,415	$8,730	$719	$380	$834	$0	$10,662	$7,712	72%	$8,529	$276,839
Mellen	347	$8,730	$719	$729	$1,121	$0	$11,298	$10,029	89%	$9,039	$233,878
Melrose-Mindoro	755	$8,730	$719	$279	$810	$0	$10,537	$7,419	70%	$8,429	$403,048
Menasha	3,554	$8,500	$0	$460	$1,037	$109	$10,106	$7,762	77%	$8,085	$396,695
Menominee Indian	1,068	$8,730	$719	$2,086	$1,320	$0	$12,855	$14,734	115%	$10,284	$122,428
Menomonee Falls	3,915	$9,571	$0	$201	$1,247	$16	$11,035	$9,120	83%	$8,828	$492,051
Menomonie Area	3,476	$8,730	$0	$735	$885	$109	$10,457	$8,066	77%	$8,366	$398,465
Mequon-Thiensville	3,950	$9,571	$0	$75	$1,193	$6	$10,846	$9,056	83%	$8,676	$496,450
Mercer	220	$8,730	$719	$553	$897	$0	$10,898	$9,184	84%	$8,719	$181,219
Merrill Area	3,401	$8,730	$719	$575	$852	$11	$10,886	$8,026	74%	$8,709	$389,867
Merton Community	847	$9,571	$0	$30	$0	$0	$9,601	$7,121	74%	$7,681	$450,554
Middleton-Cross Plains	5,137	$8,577	$0	$199	$1,081	$32	$9,889	$8,166	83%	$7,911	$578,549
Milton	2,902	$8,534	$0	$216	$890	$0	$9,640	$7,321	76%	$7,712	$325,215
Milwaukee	100,494	$9,876	$0	$2,132	$1,225	$156	$13,388	$8,794	66%	$10,711	$12,630,431
Mineral Point	854	$9,007	$742	$258	$859	$0	$10,867	$7,717	71%	$8,693	$444,097
Minocqua J1	651	$9,007	$742	$474	$744	$0	$10,967	$7,386	67%	$8,774	$359,926
Mishicot	1,145	$9,007	$742	$290	$687	$0	$10,727	$6,753	63%	$8,581	$131,255
Mondovi	1,161	$8,730	$719	$546	$0	$0	$9,995	$7,215	72%	$7,996	$133,089
Monona Grove	2,594	$8,577	$0	$207	$1,053	$10	$9,846	$8,983	91%	$7,877	$292,147
Monroe	2,814	$8,730	$0	$341	$1,414	$15	$10,499	$8,397	80%	$8,399	$322,578
Montello	849	$8,730	$719	$530	$523	$0	$10,502	$7,588	72%	$8,402	$442,024
Monticello	434	$9,007	$742	$188	$829	$0	$10,766	$8,045	75%	$8,613	$269,951

BEST COPY AVAILABLE

School District	Number of students	Basic foundation	Rural foundation	Poverty foundation	Special Education	Limited English	Total Adequacy	Actual spending	Actual as % of Adequacy	80% of Adequacy	Special Supplement
Mosinee	1,959	$8,808	$0	$325	$1,064	$0	$10,226	$8,519	83%	$8,181	$244,683
Mount Horeb Area	1,923	$8,577	$0	$153	$716	$0	$9,446	$7,397	78%	$7,557	$216,576
Mukwonago	4,924	$9,571	$0	$69	$1,092	$2	$10,734	$7,644	71%	$8,587	$618,865
Muskego-Norway	4,546	$9,571	$0	$72	$1,013	$0	$10,656	$8,225	77%	$8,525	$571,357
Necedah Area	768	$8,730	$719	$941	$541	$0	$10,931	$8,201	75%	$8,745	$408,438
Neenah	6,366	$8,500	$0	$228	$1,041	$25	$9,794	$8,030	82%	$7,835	$710,569
Neillsville	1,249	$8,730	$719	$639	$0	$0	$10,088	$7,784	77%	$8,070	$143,177
Nekoosa	1,528	$8,730	$719	$559	$830	$30	$10,868	$7,393	68%	$8,694	$175,159
Neosho J3	208	$8,730	$719	$142	$102	$0	$9,693	$9,912	102%	$7,754	$176,244
New Auburn	322	$8,769	$724	$976	$9	$0	$10,498	$9,829	94%	$8,399	$223,763
New Berlin	4,540	$9,571	$0	$108	$1,330	$36	$11,044	$10,228	93%	$8,836	$570,603
New Glarus	737	$8,730	$719	$201	$1,202	$0	$10,851	$7,570	70%	$8,681	$395,585
New Holstein	1,288	$8,500	$0	$196	$267	$4	$8,967	$7,273	81%	$7,174	$143,766
New Lisbon	728	$9,007	$742	$731	$567	$0	$11,046	$8,153	74%	$8,838	$391,853
New London	2,546	$8,730	$0	$321	$707	$0	$9,758	$7,347	75%	$7,806	$291,856
New Richmond	2,449	$9,044	$0	$289	$897	$0	$10,230	$7,714	75%	$8,184	$290,851
Niagara	571	$8,730	$719	$495	$1,127	$0	$11,070	$8,910	80%	$8,856	$326,756
Nicolet UHS	1,199	$9,571	$0	$129	$1,163	$40	$10,904	$13,324	122%	$8,723	$150,694
Norris	87	$9,876	$0	$0	$5,548	$0	$15,423	$4,705	31%	$12,339	$127,034
North Cape	195	$9,571	$0	$0	$0	$0	$9,571	$5,770	60%	$7,657	$173,008
North Crawford	638	$8,730	$719	$716	$799	$0	$10,963	$8,134	74%	$8,771	$354,536
North Fond du Lac	1,280	$8,730	$0	$262	$54	$0	$9,045	$7,448	82%	$7,236	$146,730
North Lake	402	$8,730	$0	$0	$0	$0	$8,730	$7,726	89%	$6,984	$256,683
Northern Ozaukee	907	$9,571	$0	$147	$1,189	$8	$10,915	$8,584	79%	$8,732	$113,995
Northland Pines	1,613	$8,730	$719	$568	$873	$0	$10,889	$8,942	82%	$8,712	$184,903
Northwood	406	$8,730	$719	$988	$960	$0	$11,396	$9,356	82%	$9,116	$258,341
Norwalk-Ontario-Wilton	661	$8,730	$719	$676	$582	$108	$10,814	$6,909	64%	$8,651	$364,072
Norway J7	104	$9,257	$0	$0	$0	$0	$9,257	$9,541	103%	$7,405	$12,642
Oak Creek-Franklin	4,782	$9,571	$0	$226	$983	$48	$10,827	$7,628	70%	$8,662	$601,018
Oakfield	662	$8,730	$719	$209	$110	$0	$9,767	$7,565	77%	$7,814	$364,487
Oconomowoc Area	4,254	$9,876	$0	$114	$913	$0	$10,904	$8,175	75%	$8,723	$534,657
Oconto	1,317	$8,730	$719	$537	$832	$0	$10,817	$7,473	69%	$8,653	$150,972
Oconto Falls	1,912	$8,730	$719	$373	$747	$0	$10,569	$7,271	69%	$8,455	$219,179
Omro	1,253	$8,500	$0	$225	$1,050	$0	$9,775	$8,182	84%	$7,820	$139,859
Onalaska	2,801	$8,891	$0	$323	$741	$46	$10,000	$7,545	75%	$8,000	$327,028
Oostburg	964	$9,002	$0	$77	$587	$0	$9,666	$7,181	74%	$7,733	$493,150
Oregon	3,482	$8,577	$0	$177	$1,172	$5	$9,930	$8,392	85%	$7,944	$392,157
Osceola	1,772	$8,730	$719	$174	$679	$0	$10,301	$7,022	68%	$8,241	$203,130
Oshkosh Area	10,430	$8,500	$0	$469	$1,140	$109	$10,218	$7,714	75%	$8,175	$1,164,190
Osseo-Fairchild	999	$8,730	$719	$543	$18	$0	$10,009	$7,938	79%	$9,007	$504,218
Owen-Withee	621	$8,730	$719	$831	$13	$0	$10,292	$8,180	79%	$8,233	$347,487

BEST COPY AVAILABLE

School District	Number of students	Basic foundation	Rural foundation	Poverty foundation	Special Education	Limited English	Total Adequacy	Actual spending	Actual as % of Adequacy	80% of Adequacy	Special Supplement
Palmyra-Eagle Area	1,212	$8,730	$719	$317	$1,142	$61	$10,969	$8,614	79%	$8,775	$138,935
Pardeeville Area	1,027	$8,730	$719	$384	$316	$18	$10,166	$6,809	67%	$8,133	$117,728
Paris J1	192	$8,577	$0	$101	$270	$0	$8,947	$8,127	91%	$7,158	$21,624
Park Falls	928	$8,730	$719	$457	$773	$0	$10,678	$7,460	70%	$8,543	$474,780
Parkview	1,170	$8,534	$703	$236	$1,039	$0	$10,512	$8,723	83%	$8,409	$131,117
Pecatonica Area	520	$8,730	$719	$145	$840	$0	$10,434	$8,149	78%	$8,347	$305,609
Pepin Area	355	$9,007	$742	$573	$774	$0	$11,097	$8,684	78%	$8,877	$237,195
Peshtigo	1,102	$8,730	$719	$453	$845	$0	$10,747	$7,630	71%	$8,598	$126,326
Pewaukee	2,081	$9,571	$0	$61	$1,084	$0	$10,716	$8,502	79%	$8,573	$261,547
Phelps	179	$8,730	$719	$698	$772	$0	$10,918	$11,497	105%	$8,735	$164,219
Phillips	1,188	$8,730	$719	$564	$600	$0	$10,613	$7,909	75%	$8,490	$136,184
Pittsville	816	$8,730	$719	$592	$717	$0	$10,758	$7,258	67%	$8,606	$428,341
Platteville	1,644	$8,730	$0	$540	$1,265	$6	$10,540	$8,562	81%	$8,432	$188,457
Plum City	380	$8,730	$719	$311	$816	$0	$10,575	$8,283	78%	$8,460	$247,561
Plymouth	2,563	$9,002	$0	$184	$1,016	$0	$10,202	$7,422	73%	$8,161	$302,959
Port Edwards	536	$8,730	$719	$374	$471	$90	$10,383	$8,506	82%	$8,306	$312,243
Port Wash-Saukville	2,764	$9,571	$0	$184	$998	$2	$10,755	$8,470	79%	$8,604	$347,389
Portage Community	2,539	$8,730	$0	$440	$951	$0	$10,120	$7,412	73%	$8,096	$291,053
Potosi	451	$8,730	$719	$321	$836	$0	$10,605	$8,962	85%	$8,484	$277,000
Poynette	1,121	$8,730	$719	$132	$784	$0	$10,364	$7,701	74%	$8,291	$128,504
Prairie Du Chien Area	1,238	$8,730	$719	$515	$1,019	$0	$10,982	$8,945	81%	$8,786	$141,916
Prairie Farm	365	$8,730	$719	$486	$600	$0	$10,534	$9,091	86%	$8,427	$241,341
Prentice	595	$8,730	$719	$646	$899	$0	$10,994	$7,680	70%	$8,795	$336,707
Prescott	1,211	$8,730	$0	$201	$1,005	$0	$9,935	$7,837	79%	$7,948	$138,821
Princeton	491	$8,730	$719	$368	$623	$0	$10,440	$7,733	74%	$8,352	$293,585
Pulaski Community	3,451	$9,129	$0	$194	$891	$0	$10,214	$7,611	75%	$8,171	$413,703
Racine	20,912	$9,257	$0	$989	$1,520	$101	$11,866	$8,276	70%	$9,493	$2,541,927
Randall J1	650	$8,577	$0	$84	$393	$0	$9,054	$7,591	84%	$7,243	$73,206
Randolph	460	$8,730	$719	$293	$681	$0	$10,423	$9,043	87%	$8,338	$280,731
Random Lake	1,074	$9,002	$741	$186	$1,257	$0	$11,186	$8,105	72%	$8,949	$126,952
Raymond #14	374	$9,257	$0	$214	$0	$0	$9,471	$6,845	72%	$7,577	$45,461
Reedsburg	2,428	$8,730	$719	$456	$948	$4	$10,857	$7,401	68%	$8,685	$278,329
Reedsville	741	$9,007	$742	$178	$816	$0	$10,744	$7,542	70%	$8,595	$397,243
Rhinelander	3,396	$8,730	$719	$586	$900	$0	$10,935	$8,107	74%	$8,748	$389,294
Rib Lake	589	$8,730	$719	$413	$789	$0	$10,651	$7,752	73%	$8,520	$334,219
Rice Lake Area	2,729	$9,007	$742	$466	$1,059	$8	$11,282	$7,640	68%	$9,026	$312,834
Richfield J 1	429	$9,876	$0	$61	$1,114	$0	$11,051	$8,422	76%	$8,841	$272,618
Richland	1,603	$8,730	$719	$568	$1,360	$0	$11,376	$9,035	79%	$9,101	$183,757
Richmond	365	$8,730	$0	$18	$0	$0	$8,748	$8,455	97%	$6,998	$241,341
Rio Community	549	$8,730	$719	$311	$597	$21	$10,377	$8,022	77%	$8,302	$317,634
Ripon	1,638	$8,730	$719	$287	$749	$25	$10,509	$8,033	76%	$8,408	$187,769

School District	Number of students	Basic foundation	Rural foundation	Poverty foundation	Special Education	Limited English	Total Adequacy	Actual spending	Actual as % of Adequacy	80% of Adequacy	Special Supplement
River Falls	2,956	$8,730	$0	$193	$989	$10	$9,922	$7,334	74%	$7,937	$338,855
River Ridge	667	$9,007	$742	$574	$641	$0	$10,965	$9,883	90%	$8,772	-$366,560
River Valley	1,615	$9,007	$742	$428	$1,184	$0	$11,362	$8,111	71%	$9,090	$185,132
Riverdale	913	$8,730	$719	$727	$666	$0	$10,841	$8,388	77%	$8,673	$468,560
Rosendale-Brandon	1,038	$8,730	$719	$171	$447	$0	$10,067	$8,408	84%	$8,053	$118,989
Rosholt	758	$8,730	$719	$403	$14	$3	$9,869	$7,699	78%	$7,895	$404,292
Royall	739	$8,730	$719	$667	$838	$0	$10,954	$9,583	87%	$8,763	$396,414
Rubicon J6	139	$8,730	$719	$118	$359	$0	$9,926	$8,742	88%	$7,941	$147,634
Saint Croix Central	1,003	$9,044	$745	$210	$965	$0	$10,965	$7,583	69%	$8,772	$119,119
Saint Croix Falls	1,137	$8,730	$719	$275	$732	$0	$10,455	$8,054	77%	$8,364	$130,338
Saint Francis	1,300	$9,571	$0	$510	$1,139	$0	$11,220	$7,636	68%	$8,976	$163,388
Salem J2	1,138	$8,850	$0	$287	$577	$26	$9,740	$7,040	72%	$7,792	$128,166
Sauk Prairie	2,683	$8,730	$719	$387	$917	$46	$10,799	$7,985	74%	$8,639	$307,561
Seneca	353	$8,730	$719	$568	$686	$0	$10,703	$9,084	85%	$8,562	$236,365
Sevastopol	664	$8,083	$666	$275	$885	$0	$9,909	$9,702	98%	$7,927	$365,316
Seymour Community	2,472	$8,771	$0	$343	$639	$0	$9,753	$7,266	74%	$7,803	$275,923
Sharon J11	303	$9,007	$0	$627	$99	$46	$9,779	$7,859	80%	$7,823	$215,634
Shawano-Gresham	2,922	$9,007	$742	$544	$1,165	$15	$11,474	$7,222	63%	$9,179	$334,958
Sheboygan Area	10,000	$9,002	$0	$585	$1,218	$343	$11,147	$8,568	77%	$8,918	$1,182,049
Sheboygan Falls	1,688	$9,002	$0	$163	$1,382	$0	$10,546	$7,493	71%	$8,437	$199,530
Shell Lake	558	$8,730	$719	$813	$1,026	$0	$11,287	$9,315	83%	$9,030	$321,365
Shiocton	827	$8,500	$700	$294	$728	$0	$10,222	$7,810	76%	$8,178	$430,409
Shorewood	1,877	$9,876	$0	$283	$962	$187	$11,308	$9,712	86%	$9,047	$235,908
Shullsburg	422	$8,730	$719	$335	$1,119	$0	$10,903	$8,302	76%	$8,722	$264,975
Silver Lake J1	590	$8,577	$0	$372	$500	$0	$9,448	$7,495	79%	$7,559	$66,448
Siren	518	$8,730	$719	$1,079	$901	$0	$11,428	$9,242	81%	$9,143	$304,780
Slinger	2,731	$9,571	$0	$121	$723	$0	$10,415	$6,993	67%	$8,332	$343,241
Solon Springs	384	$8,602	$708	$987	$1,357	$0	$11,655	$9,270	80%	$9,324	$248,576
Somerset	1,216	$9,044	$0	$165	$813	$0	$10,022	$7,032	70%	$8,018	$144,416
South Milwaukee	3,278	$9,571	$0	$695	$1,035	$93	$11,394	$7,629	67%	$9,115	$411,990
South Shore	260	$9,007	$742	$991	$1,317	$0	$12,057	$12,372	103%	$9,646	$197,805
Southern Door	1,296	$8,730	$719	$309	$1,262	$0	$11,019	$8,168	74%	$8,816	$148,565
Southwestern Wisconsin	622	$8,730	$719	$280	$702	$0	$10,431	$8,762	84%	$8,345	$347,902
Sparta Area	2,800	$8,730	$719	$615	$859	$9	$10,932	$7,325	67%	$8,745	$320,973
Spencer	873	$9,512	$783	$242	$26	$0	$10,563	$7,592	73%	$8,450	$460,940
Spooner	1,722	$8,730	$719	$683	$908	$0	$11,040	$7,744	70%	$8,832	$197,398
Spring Valley	748	$8,730	$719	$294	$685	$0	$10,427	$8,019	77%	$8,342	$400,146
Stanley-Boyd Area	1,052	$8,789	$724	$865	$12	$0	$10,390	$8,540	82%	$8,312	$121,416
Stevens Point Area	8,011	$8,730	$0	$480	$1,110	$124	$10,443	$8,110	78%	$8,355	$918,326
Stockbridge	260	$8,500	$700	$62	$67	$0	$9,328	$8,760	94%	$7,462	$197,021
Stone Bank	318	$9,571	$0	$102	$0	$0	$9,673	$9,333	96%	$7,738	$225,367

BEST COPY AVAILABLE

School District	Number of students	Basic foundation	Rural foundation	Poverty foundation	Special Education	Limited English	Total Adequacy	Actual spending	Actual as % of Adequacy	80% of Adequacy	Special Supplement
Stoughton Area	3,678	$8,577	$0	$204	$1,067	$4	$9,852	$7,366	75%	$7,881	$414,231
Stratford	772	$9,512	$783	$353	$28	$0	$10,675	$7,270	68%	$8,540	$418,024
Sturgeon Bay	1,444	$8,730	$0	$448	$1,055	$2	$10,234	$7,989	78%	$8,188	$165,530
Sun Prairie Area	4,771	$8,577	$0	$307	$1,268	$22	$10,173	$8,395	83%	$8,139	$537,329
Superior	5,231	$8,602	$0	$889	$1,094	$22	$10,607	$8,039	76%	$8,486	$590,888
Suring	642	$8,730	$719	$778	$428	$0	$10,655	$8,716	82%	$8,524	$356,194
Swallow	293	$9,571	$0	$37	$87	$0	$9,695	$8,494	88%	$7,756	$214,725
Thorp	636	$8,730	$719	$615	$15	$0	$10,078	$8,807	87%	$8,063	$353,707
Three Lakes	781	$8,730	$719	$396	$948	$0	$10,792	$8,734	81%	$8,633	$413,828
Tigerton	405	$8,730	$719	$503	$893	$0	$10,844	$9,198	85%	$8,675	$257,926
Tomah Area	3,030	$8,730	$719	$524	$863	$0	$10,835	$7,282	67%	$8,668	$197,338
Tomahawk	1,712	$8,730	$719	$451	$785	$0	$10,685	$7,947	74%	$8,548	$196,252
Tomorrow River	883	$8,730	$719	$320	$814	$3	$10,585	$8,289	78%	$8,468	$456,121
Trevor Grade School	348	$8,730	$0	$623	$803	$0	$10,156	$8,771	86%	$8,125	$234,292
Tri-County Area	844	$8,730	$719	$1,059	$737	$57	$11,301	$8,284	73%	$9,041	$439,950
Turtle Lake	655	$8,730	$719	$697	$635	$0	$10,781	$7,324	68%	$8,625	$361,585
Twin Lakes #4	397	$8,577	$0	$1,130	$545	$23	$10,275	$7,992	78%	$8,220	$44,712
Two Rivers	2,203	$9,007	$0	$448	$928	$67	$10,451	$7,714	74%	$8,361	$252,537
Union Grove J1	610	$9,257	$0	$234	$0	$0	$9,491	$6,323	67%	$7,593	$74,148
Union Grove UHS	653	$8,571	$0	$74	$0	$0	$8,646	$8,016	93%	$6,916	$79,374
Unity	1,263	$9,007	$742	$846	$719	$0	$11,314	$8,014	71%	$9,051	$144,782
Valders Area	1,211	$8,730	$719	$125	$810	$0	$10,384	$8,068	78%	$8,307	$138,821
Verona Area	4,189	$8,577	$0	$308	$1,051	$21	$9,956	$8,371	84%	$7,965	$471,782
Viroqua Area	1,285	$8,730	$719	$657	$1,231	$2	$11,339	$8,272	73%	$9,071	$147,304
Wabeno Area	633	$8,730	$719	$789	$428	$0	$10,666	$8,096	76%	$8,532	$352,463
Walworth J1	494	$8,730	$0	$446	$28	$37	$9,240	$6,547	71%	$7,392	$294,829
Washburn	771	$8,730	$666	$442	$751	$0	$9,943	$8,201	82%	$7,954	$409,682
Washington	121	$9,007	$742	$0	$906	$0	$10,655	$9,233	87%	$8,524	$140,171
Washington-Caldwell	211	$9,257	$0	$0	$0	$0	$9,257	$7,015	76%	$7,405	$178,948
Waterford Graded J1	1,392	$9,257	$0	$140	$0	$0	$9,397	$6,123	65%	$7,517	$169,202
Waterford UHS	991	$8,571	$0	$0	$0	$0	$8,571	$7,540	88%	$6,857	$120,460
Waterloo	966	$9,007	$742	$274	$1,220	$21	$11,265	$8,059	72%	$9,012	$490,536
Watertown	3,812	$9,007	$0	$528	$1,211	$32	$10,778	$8,132	75%	$8,623	$436,981
Waukesha	12,575	$9,571	$0	$334	$1,311	$102	$11,317	$8,263	73%	$9,054	$1,580,469
Waunakee Community	2,887	$9,577	$0	$57	$915	$14	$9,563	$7,362	77%	$7,651	$325,145
Waupaca	2,602	$8,730	$0	$456	$864	$5	$10,045	$7,101	71%	$8,036	$298,275
Waupun	2,511	$8,730	$719	$294	$802	$1	$10,546	$7,852	74%	$8,437	$287,844
Wausau	9,014	$9,512	$0	$664	$1,170	$446	$11,991	$8,681	72%	$9,593	$1,125,867
Wauwatosa	745	$8,730	$719	$909	$566	$0	$10,923	$8,628	79%	$8,739	$398,902
Wautoma Area	1,639	$8,730	$719	$824	$501	$222	$10,995	$7,972	73%	$8,796	$187,884
Wauwatosa	6,174	$9,571	$0	$244	$1,089	$86	$10,991	$8,259	75%	$8,793	$775,970

BEST COPY AVAILABLE

School District	Number of students	Basic foundation	Rural foundation	Poverty foundation	Special Education	Limited English	Total Adequacy	Actual spending	Actual as % of Adequacy	80% of Adequacy	Special Supplement
Wauzeka-Steuben	368	$8,730	$719	$768	$794	$0	$11,011	$9,140	83%	$8,808	$242,585
Webster	731	$8,730	$719	$1,223	$1,092	$0	$11,764	$8,683	74%	$9,411	$393,097
West Allis	8,553	$9,571	$0	$594	$1,157	$28	$11,350	$8,628	76%	$9,080	$1,074,970
West Bend	6,626	$9,571	$0	$269	$902	$19	$10,762	$7,330	68%	$8,610	$832,778
West Depere	1,831	$9,129	$0	$417	$782	$0	$10,328	$7,926	77%	$8,262	$219,499
West Salem	1,606	$8,891	$0	$354	$983	$29	$10,257	$7,816	76%	$8,206	$187,507
Westby Area	1,224	$8,730	$719	$362	$581	$0	$10,392	$7,812	75%	$8,314	$140,311
Westfield	1,437	$8,730	$719	$704	$638	$0	$10,791	$7,460	69%	$8,633	$164,728
Weston	401	$8,730	$719	$393	$682	$0	$10,524	$7,418	70%	$8,419	$256,268
Weyauwega-Fremont	1,108	$8,730	$719	$305	$990	$2	$10,746	$8,367	78%	$8,597	$127,013
Weyerhaeuser Area	251	$8,730	$719	$1,008	$1	$0	$10,458	$9,045	86%	$8,366	$194,073
Wheatland J1	508	$8,577	$0	$375	$656	$0	$9,607	$7,920	82%	$7,686	$57,213
White Lake	287	$8,730	$719	$1,420	$700	$0	$11,569	$8,813	76%	$9,255	$209,000
Whitefish Bay	2,440	$9,876	$0	$0	$791	$35	$10,701	$9,315	87%	$8,561	$306,668
Whitehall	777	$8,730	$719	$469	$763	$0	$10,680	$8,227	77%	$8,544	$412,170
Whitewater	2,098	$8,730	$0	$497	$133	$143	$9,502	$7,332	77%	$7,601	$240,500
Whitnall	2,324	$9,571	$0	$212	$992	$68	$10,843	$8,677	80%	$8,675	$292,088
Wild Rose	766	$8,730	$719	$708	$371	$27	$10,554	$7,186	68%	$8,443	$407,609
Williams Bay	522	$8,730	$0	$283	$17	$26	$9,056	$9,216	102%	$7,245	$306,438
Wilmot Grade School	145	$8,577	$0	$200	$443	$0	$9,220	$8,589	93%	$7,376	$149,830
Wilmot UHS	1,089	$8,577	$0	$225	$589	$0	$9,390	$8,205	87%	$7,512	$122,647
Winneconne Community	1,676	$7,871	$648	$117	$761	$0	$9,396	$7,242	77%	$7,517	$187,074
Winter	438	$8,730	$719	$1,163	$1,422	$0	$12,033	$9,724	81%	$9,627	$271,609
Wisconsin Dells	1,738	$8,730	$0	$660	$909	$0	$10,298	$7,817	76%	$8,239	$199,232
Wisconsin Heights	1,206	$8,577	$0	$212	$1,036	$0	$9,824	$8,347	85%	$7,859	$135,825
Wisconsin Rapids	6,050	$8,730	$0	$495	$943	$116	$10,284	$8,352	81%	$8,227	$693,530
Wittenberg-Birnamwood	1,420	$8,730	$719	$611	$983	$0	$11,043	$7,775	70%	$8,834	$162,779
Wonewoc-Union Center	466	$8,730	$719	$451	$604	$0	$10,504	$7,406	71%	$8,403	$283,219
Woodruff J1	568	$9,007	$742	$442	$1,408	$0	$11,599	$8,948	77%	$9,279	$325,512
Wrightstown Community	964	$8,730	$719	$290	$545	$60	$10,342	$7,486	72%	$8,274	$489,706
Yorkville J2	314	$8,771	$0	$568	$0	$0	$9,339	$7,614	82%	$7,471	$219,248
Wisconsin per pupil		$9,033	$183	$644	$1,019	$67	$10,946	$8,241	75.3%	$8,757	$175
Wisconsin total	870,652	$7,864,478,501	$158,903,312	$560,787,925	$887,614,976	$58,386,654	$9,530,171,368	$7,174,667,390	75.3%	$7,624,137,094	$152,778,071

CHAPTER SIX: IS ADEQUACY FEASIBLE?

Challenge to Implementation

Wonderful idea, a critical reader might say: Base education spending on real educational needs; give every child an equal opportunity for a properly sized classroom and school; surround students with well-trained teachers, the latest educational technology, and a range of supports for diverse special needs.

But what about some fundamental questions:

- Is Adequacy too expensive?
- Is there reason to believe Adequacy funding would lead to improved student performance?
- Would Adequacy undermine local control, a long-standing principle of Wisconsin school funding?
- What system of taxes would be used to finance Adequacy?

This final chapter will address these questions.

Dealing with the High Cost of Adequacy

Adequacy is expensive. The difference between total K-12 spending in 2000-'01, and what it would cost to give each district the calculated Adequacy level of spending, is an average of $2,705 per pupil. With about 870,000 students statewide, that amounts to an additional annual expense of approximately $2.36 billion, or about 32.8% (not including capital costs).

"Unquestionably, the cost to fix the system is high," acknowledged Wisconsin Supreme Court Justice William A. Bablitch, in his written opinion in the Court's decision in the *Vincent* case. "The cost of not fixing it will be much higher," he continued. "Uneducated citizens will extract extremely high social costs in the future. As the mechanic on television says, 'You can pay me now or pay me later.'" [Vincent, 2000]

The high cost of student failure is evident in today's state and local budgets, in such areas as prisons (the fastest growing portion of state spending in the last decade) and other symptoms of social distress. Nevertheless, the possibility that we would need to spend less in the future dealing with the social consequences of personal failure, does not make it easier to spend more in the present in order to increase the likelihood of personal success. It is a dilemma.

But there is way out of this dilemma – a gradual phase-in of the Adequacy model. A phase-in process allows the state to implement the basic structure of Adequacy in the short term, adding only modestly to current costs.

BEST COPY AVAILABLE

Even if there were to be no increase in K-12 spending, implementing the Adequacy structure would be a major improvement for Wisconsin school finance, because it would rationalize a system that now lacks logic and clarity. The current school finance system lacks meaningful connection between spending and educational goals and practices. An Adequacy structure – even if only partially funded – at least establishes those critical links, creates a sensible and transparent system, and provides a coherent blueprint for future budget planning.

What would it mean to implement a partially funded Adequacy structure? It means that, rather than providing each district with the amounts determined by the foundation levels given in Chapter Five, districts would receive a specified percentage of that amount. The percentage chosen would represent a "point of entry" for the Adequacy structure.

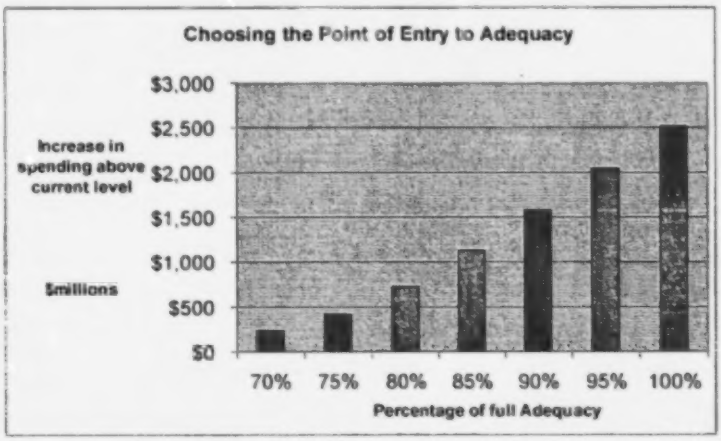
The cost of partially implementing Adequacy can be calculated for any percentage level. The table below shows the total cost, in terms of 2000-'01 spending, for various levels of implementation. Also shown is the cost including the $153 million special adjustment described in Chapter Five.

Phasing In Adequacy

% of Adequacy	Cost of Adequacy (including hold-harmless provision)	Total cost including special adjustment
70%	$80 million	$233 million
75%	$262 million	$415 million
80%	$570 million	$723 million
85%	$975 million	$1.128 billion
90%	$1.428 billion	$1.581 billion
95%	$1.894 billion	$2.048 billion
100%	$2.365 billion	$2.518 billion

The statewide average spending is currently at 75.3% of Adequacy. If the point of entry to Adequacy were selected at that percentage, total costs would be approximately equal to the actual level of spending in 2000-'01. Thus, the basic foundation would be set at 75.3% of $8,500; the allocation for poverty would be 75.3% of $3,200; and similarly for other foundation levels.

While that makes it possible to implement an Adequacy structure without additional spending, there is a critical problem. If all districts were guaranteed funding only at the 75.3% level,



BEST COPY AVAILABLE

264 school districts – 62% of the state's districts – would have funding levels set below their current actual spending. Simply implementing 75.3% Adequacy thus could lead to lower spending in 264 districts, an unacceptable consequence.

Therefore, this model also requires a "hold-harmless" provision. This provides funds to every district that would otherwise lose money under an Adequacy implementation that yields a level less than their current spending. This hold-harmless supplement ensures that those districts suffer no financial loss. At the 75.3% level, this supplement costs $275 million.

Phasing in Adequacy is not just a way of dealing with fiscal reality. It would be necessary even in the presence of unlimited dollars. Programmatic issues require phase-in.

First, there is not an adequate supply of fully trained teachers to staff the classrooms across Wisconsin. Second, many districts lack the physical facilities for smaller classes. Third, school boards and administrators need to conduct far-reaching strategic planning to make decisions about how best to use any additional funding to meet the particular needs of their districts and schools. Thus, a multi-year phase-in is both a programmatic and a fiscal necessity.

Adequacy and Accountability

Accountability is an appropriate expectation of any school finance system. Accountability requires a way of measuring the results of spending, some way of knowing whether the money is well spent.

A commitment to accountability is built into the theory of Adequacy, because the point of the system is to link spending with student performance. What drives spending levels, in an Adequacy system, are the very educational standards around which resource requirements are based.

Wisconsin's current system, by contrast, has no corresponding internal logic leading to accountability. When spending in one year is almost entirely an arithmetic function of spending the year before, and so on back to an arbitrary base in 1993, there is no reason to expect any significant link between spending and educational outcome.

However, it is one thing to show that there is a general structural connection between spending and outcomes, in Adequacy, and quite another to show that the particular form of Adequacy developed here is meaningfully linked to outcomes. Is there reason to think that the specific resource standards developed in Chapter Four, and the subsequent financial support recommended in Chapter Five, would lead to improved student performance?

The question is especially appropriate given the charge by critics of school spending that there are no meaningful links between actual spending and school performance. For example, Wisconsin

Manufacturers & Commerce argued that because "nearly 60% of top performing districts spent below statewide average," the state's controls on school spending should be maintained and even broadened to other areas of government. [WMC, 2001] Indeed, in Wisconsin (as elsewhere) there is no significant statistical correlation between per-pupil spending and student performance, as measured on the Wisconsin Knowledge and Concepts Examination (WKCE). The WKCE, the state's official standardized tests, are given to fourth, eighth, and tenth graders.

The lack of correlation should not be a surprise. Rather, it is to be expected. As many have noted, including the Wisconsin Supreme Court in the *Vincent* decision, different students require different levels of resources. Districts with large numbers of students with disabilities, or students with limited English, or students from low-income households, are likely to require more resources. Districts with especially large transportation costs – such as some rural districts – will have higher expenses. Districts with especially cold winters will have higher fuel bills. As Reschovsky and Imazeki note: "Costs are higher in some districts than others largely because more resources are required to educate some students compared to others and because some districts will have to pay more money than other districts to attract high quality teachers." [Reschovsky and Imazeki, 2001]

So, there's no significant connection between actual spending and actual performance. Is there reason to expect a correlation between some form of Adequacy spending and performance? Yes, because Adequacy spending levels are specifically constructed by using factors that affect the level of resources needed. These factors include the concentration of students with special needs and the geographical location of the district.

To determine whether there is a significant connection between the calculated Adequacy levels and student performance, it is necessary to calculate an Adequacy measure based on the ratio of actual funding to the designated level of Adequacy in that district. For example, if the Adequacy level for a particular district is $10,000 per student, and that district actually spends $8,500 per student, the district is funded at 85% of Adequacy.

Using this measure of relative Adequacy, one district could spend more per student than another, but still be funded less adequately. For example, if District A has an Adequacy level of $10,000 and spends $9,000, it is at 90% of Adequacy. If District B has an Adequacy level of $15,000 and spends $10,000, it is at 67% of Adequacy. District B spends more per pupil, but is less Adequately funded. Because it is less Adequately funded, it should not be expected that District B, despite its higher per-pupil spending, would have higher student performance than District A.

Based on the Adequacy levels calculated in Chapter Five, each district's level of Adequacy was calculated, using this methodology. A statistical analysis was then conducted to assess whether there was a significant correlation between the district's level of Adequacy and its student performance.

Student performance was measured using each district's average percentile score on the 2001 WKCE tests. Based on this analysis, there is a statistically significant correlation at the .01 level between districts' levels of Adequacy and their students' WKCE scores.

The correlation between level of Adequacy and student performance means that it is reasonable to believe that raising districts' funding to the Adequacy level will lead to higher test scores statewide. Implementing Adequacy – which includes movement over time toward full funding of Adequacy – would result in improved student performance.

Adequacy and Local Control

Adequacy is not a threat to local control. On the contrary, under the Adequacy structure, elected school board members would be re-invested with the capacity to set local school budgets, including the power to increase local tax levies as needed. This would greatly expand the powers of local school boards and administrators, because it would give them the financial flexibility to make decisions based on educational criteria, free of revenue limits and the QEO. By abolishing the cumbersome system of revenue controls, the Adequacy system removes the most important hindrance to local control present in the current system. An Adequacy system guarantees a level of funding for each district, but allows districts to exceed those levels through local taxes beyond what is necessary to comply with the Adequacy structure.

In determining the financial needs of school districts, this analysis laid out a series of resource standards in Chapter Four. These were priced, yielding the Adequacy funding levels of Chapter Five. In administering the system, however, it is not expected that districts would be required to exactly mimic those resource standards. Rather, the resource standards – and the funding levels they require – are the basis for allocating funds to districts, in the form of block grants.

It is therefore up to the discretion of each district to decide how to spend the money, as it is in the current system. There would be no greater degree of control by the state over the educational decisions made by local school authorities.

It is expected, however, that districts would use the additional funds in such a manner as to gradually raise the performance level of its students. It would be only after a repeated failure to show such improvement that there would be any reason for the state to intervene.

Such state intervention is not part of the current funding system. Nor does this paper contain a specific proposal for how such intervention might be designed. It is noteworthy that the 2002 federal Leave No Child Behind Act for education funding contains requirements that districts show progress, as measured by state tests. The federal law contains specific requirements about what progress is expected, and what consequences follow on the failure to show such progress. These federal requirements of course apply to Wisconsin schools, and it might be that the state would simply adopt the same requirements relative to state funding. The Adequacy system would involve far less state intervention and oversight than exists under the current system. Local control is reinstated with to the implementation of an Adequacy system.

BEST COPY AVAILABLE

Adequacy and Taxes

What kind of tax structure would support Adequacy?

Among the states, there are many systems for generating revenue for public schools. Some focus on local property taxes, others on state property taxes. Some rely heavily on sales taxes, others on state income taxes. Michigan, for example, uses a portfolio of taxes including nearly three-fourths of its 6% state sales tax; a statewide property tax of six mills ($6 for each $1,000 of property value); a portion of its income, tobacco, liquor, and business facility taxes; and all its lottery profits. Wyoming uses a much different portfolio of taxes, including a statewide property tax of 12 mills; part of a vehicle registration tax; part of a railroad car tax; and nearly half its federal mineral royalties. [National Center for Education Statistics, 2001]

An Adequacy model of finance is a method for determining how much money needs to be raised, and how that money should be distributed. It does not imply one approach to raising the funds over any other. The only certainty in an Adequacy system is that districts choosing to spend above guaranteed Adequacy levels would have to raise the additional funds on their own, without state support.

In Wisconsin, several proposals have been advanced to reform the system for raising money for schools. State Sen. Michael Ellis (R-Neenah) has proposed a system with a statewide property tax replacing local property taxes. Because there would be a constant tax rate statewide – replacing the current system of widely varying rates in each of the state's districts – the system would produce taxpayer equity by requiring equal tax effort by every property owner. Ellis does not propose to increase the amount of funding for public schools. Rather, he sets his proposed statewide property tax at a level sufficient to replace, but not augment, current local school property taxes.

Another proposal has been advanced by State Representatives Michael Lehman (R-Hartford) and Wayne Wood (D-Janesville). Its main feature is to eliminate school property taxes altogether, replacing them with increased revenue from a state sales tax. Under their proposal, the sales tax would be both expanded to include a number of services not currently taxed and raised above its current 5%. Like Ellis, Lehman and Wood do not propose an increase in school funding. They propose sales tax levels just sufficient to replace, but not expand, revenue generated by current local school property taxes.

Both the Ellis and the Lehman-Wood plans could be adjusted to produce increased revenue that would move the school funding closer to Adequacy.

Many other tax options and combinations could provide sufficient revenue for the Adequacy model. In 2000-01, school revenues included approximately $4.3 billion in state funding plus approximately $2.9 billion in local school property taxes. The challenge is to find funding sources sufficient to generate

these dollar amounts in addition to the extra funding necessary to implement Adequacy at some specified percentage. For example, it was noted earlier in this chapter that funding at 80% of Adequacy would require approximately $700 million over and above the $7.2 billion raised from state General Purpose Revenue (GPR) and local school property taxes (2000-2001).

A minimalist approach to this challenge would leave the local property tax contribution at its current level but increase funding from state GPR. This could be accomplished in a number of ways: transferring funds from other state programs and/or raising additional state revenue by some combination of closing tax loopholes, expanding tax bases, raising tax rates, or increasing state fees.

In February 2002, the Wisconsin Legislative Fiscal Bureau issued a paper on "Alternative General Fund Revenue Sources (General Fund Taxes)." [Larson, Russell and Shanovich, 2002] This report detailed estimates for increased revenues from a wide variety of changes in tax law, including personal and corporate income taxes, sales taxes, and excise taxes.

For example, funding 80% of Adequacy – requiring an additional $723 million – could be accomplished in many different ways, according to the Fiscal Bureau's estimates.

Tax Package 1.

- § Raise the state sales tax from 5.0% to 5.5% to generate $383 million;
- § Tax personal capital gains in the same manner as does the federal government (that is, not exempting the first 60%) to generate $212 million;
- § Require a sales tax on legal, architectural, and accounting services which would generate $183 million.

These three changes would raise $778 million, more than enough to fund schools at 80% of Adequacy.

Tax package 2.

- § Raise the state sales tax from 5.0% to 6.0% to generate $766 million, the entire amount required for 80% of Adequacy.

Tax Package 3.

- § Impose a sales tax on advertising, computer consulting, public relations, and personnel services to generate $301 million;
- § Require combined reporting of income for businesses with out-of-state operations to generate $70 million;
- § Raise the corporate income tax rate from 7.9% to 8.9% to generate $102 million;
- § Eliminate the 60% exemption of capital gains from the state income tax, generating $212 million.

This package would raise $685 million.

These are several examples of the numerous possibilities suggested by the Fiscal Bureau report. And as the report notes, "The alternatives presented in this paper should not be viewed as comprehensive. There are many other options that could be considered by the Legislature."

A more fundamental tax reform package would enact comprehensive tax changes rather than simply packaging tax increases to supplement current GPR and local funding. Eliminating the local school property tax as proposed by both Ellis and the Lehman-Wood requires that a minimum of $2.9 billion be generated statewide plus additional dollars for Adequacy.

For example, a six mill statewide property tax would generate about $1.7 billion, based on 2000-'01 property values. A six-mill tax is a significant cut in property taxes in all but a handful of school districts. In over 100 districts, a six-mill tax would slash school property taxes by more than 50%.

With this dramatic reduction in property taxes, it would be feasible to increase other taxes. A hike in the state sales tax from 5.0% to 7.0%, for example, would generate $1.5 billion, according to Fiscal Bureau estimates. Along with another small changes – such as increasing the corporate income tax from 7.9% to 8.9% as well as a 3.75% increase in personal income tax (for example, the 6.75% top rate would rise to 7.00%) — this combination would be enough to fund Adequacy at 80%.

A great variety of such tax combinations can be constructed. Determining the optimal revenue structure is a political task. Each alternative revenue-generating system must be examined to see its impact on different categories of taxpayers. Some changes would affect mainly businesses; other mainly property owners; owners mostly lower-income taxpayers. Reductions in property taxes, for example, might not be passed on to renters. Increases in sales taxes generally have a greater negative impact on lower-income workers.

Moreover, many have recommended that whatever system is used, a specified stream of tax revenue be dedicated to funding public schools, a revenue stream built on an expanding base to generate increased funding needs over time.

CONCLUSION

Wisconsin, like so many other states, is facing a crisis in public education funding. The current school-finance structure has evolved from a simple, local property tax system to today's convoluted three-tier mixture of local, state, and federal funding. Revenue caps instituted nearly a decade ago have cramped budgets in many districts. Schools have been forced to reduce staffing levels, academic programs, student services, facility maintenance, and extracurricular activities. Parents, educators, and community leaders have reported, petitioned, implored, and converged on the state Capitol to demand more state aid. Policymakers are alerted to the significance of the issue and are exploring mechanisms for improving the finance structure.

In 1998, the Institute for Wisconsin's Future began a coalition effort to develop a proposal for school finance reform that would ensure links among educational goals, children's needs, and school funding levels. IWF based this effort on the new Adequacy approach to education finance, which had evolved nationally in the 1990s in response to state court decisions, the standards-based reform in education, and the failure of equity challenges to provide sufficient resources for all school children. This approach to funding defines the resources needed to meet state academic standards, and establishes a funding floor for all districts derived from the costs of the designated resources.

For more than three years, IWF worked with education organizations and specialists to research the staffing levels, curriculum options, student services, and technology needed to optimize the opportunity for all Wisconsin students to meet the Department of Public Instruction academic standards. This effort included a review of literature on resource requirements, the creation of prototype models for quality schools, a survey of teachers and principals, and a synthesis of the information compiled into a final set of resource standards.

Through this process, seven critical resources for effective learning were identified:

- Small schools,
- Small classes,
- Broad curriculum options,
- Higher pay and ongoing training for teachers,
- Sufficient access to technology,
- Supplemental funding for rural schools, and
- Supplemental services for low-income children.

These were quantified and priced. The result was that to ensure all schools the ability to afford the targeted resources, districts would need at least $8,500 per student, with additional allocations for students with disabilities or with limited-English proficiency, children from families in poverty, and rural schools.

Wisconsin has always valued knowledge and skills, investing heavily in an education system that has earned national respect. However, the dramatic changes in the state's economy over the past quarter-century have created new challenges that the current system is unprepared to grapple with.

With manufacturing no longer as dominant a part of the Midwest economy, Wisconsin has seen the emergence of both a high-technology, higher wage economy and a service sector with a small elite of highly paid specialists and a large work force of lower skilled, lower-paid citizens. The public schools will play the crucial role in determining the capacity of the upcoming generation of workers to meet the demands of a sophisticated, technical, globally oriented economy.

Policymakers are caught between the rhetoric of high educational standards and the reality of a school system increasingly unable to serve all its students, especially those with special needs. The Adequacy funding model is a serious analysis of how Wisconsin can bridge the gap between rhetoric and reality. If they had the resources needed to satisfy rigorous academic standards, Wisconsin schools could move beyond the current situation, where only one of three students meets national proficiency standards. [See Appendix Two for details of proficiency results for Wisconsin students.]

Adequacy is a return to basic Wisconsin values – investing realistically but substantially in educational systems equipped to prepare students for an ever-changing and difficult job market. This is no silver bullet. Adequacy requires long-term support for schools, not undermined by political fads or a cyclical commitment.

An Adequacy system is straightforward common sense. It is favored by court decisions in a growing number of states. It is better for students and their parents because it provides high quality educational opportunities. It is better for educators, because it provides them the resources they need to do their jobs properly. It is better for taxpayers and government officials, because it allows ways to hold schools accountable for the money they spend. And it is better for Wisconsin's future, because while long-term economic health requires fiscal prudence, it also demands an educational system second to none in the world.

APPENDICES

Appendix One

Synopsis of Wisconsin Model Academic Standards

I. **LANGUAGE ARTS:** The language arts standards, like those of most states, do not specify a list of authors or works that must be read by all students. Selection of authors and works is left to language arts specialists who create the curriculum in each school district. What is important is that students learn to read well and read enough to meet their various needs and interests, that they have opportunities to read quality literature, and that they love to read. The domain of language arts is divided into six sets of standards for focus and clarity, although these divisions, in the classroom and in the practical use of language, are artificial.

A. **Reading/Literature:** Students in Wisconsin will read and respond to a wide range of writing to build an understanding of written materials, of themselves, and of others.

Grade-specific performance standards should ensure that students are able to:

1) Use effective reading strategies to achieve their purposes in reading.
2) Read, interpret, and critically analyze literature.
3) Read and discuss literary and non-literary texts in order to understand human experience.
4) Read to acquire information.

B. **Writing:** Students will write clearly and effectively to share information and knowledge, to influence and persuade, to create and entertain.

Grade-specific performance standards should ensure that students are able to:

1) Create or produce writing to communicate with different audiences for a variety of purposes.
2) Plan, revise, edit, and publish clear and effective writing.
3) Understand the function of various forms, structure, and punctuation marks of standard American English and use them appropriately in communication.

C. Oral Language: Students will listen to understand and will speak clearly and effectively for diverse purposes.

Grade-specific performance standards should ensure that students are able to:
1) Orally communicate information, opinions, and ideas effectively to different audiences for a variety of purposes.
2) Listen to and comprehend oral communications.
3) Participate effectively in discussion.

D. Language: Students will apply their knowledge of the nature, grammar, and variations of American English.

Grade-specific performance standards will ensure that students are able to:
1) Develop their vocabulary of words, phrases, and idioms as a means of improving communication.
2) Recognize and interpret various uses and adaptations of language in social, cultural, regional, and professional situations, and learn to be flexible and responsive in their use of English.

E. Media and Technology: Students will use media and technology critically and creatively to obtain, organize, prepare and share information; to influence and persuade; and to entertain and be entertained.

Grade-specific performance standards will ensure that students are able to:
1) Use computers to acquire, organize, analyze, and communicate information.
2) Make informed judgments about media and products.
3) Create products appropriate to audience and purpose.
4) Demonstrate a working knowledge of media production and distribution.
5) Analyze and edit media work as appropriate to audience and purpose.

F. Research and Inquiry: Students will locate, use, and communicate information from a variety of print and non-print materials.

Grade-specific performance standards will ensure that students are able to:
1) Conduct research and inquiry on self-selected or assigned topics, issues, or problems and use an appropriate form to communicate their findings.

II. MATHEMATICS: The content of these standards reflects the shift in mathematical emphasis necessitated by technological advances in an information society. The understanding of mathematical concepts has become imperative for every citizen as everyday functions become more mathematically complex and as low-skill jobs become nonexistent. The following content and performance standards do not reflect the content of higher-level "college preparatory" courses. Rather, they reflect the content of a core mathematical experience that ALL students should encounter, regardless of what mathematics courses they choose.

Important goals for students are:

- to develop a deep conceptual understanding in order to make sense of mathematics; to master specific knowledge necessary for its application to real problems, for the study of related subject matter, and for continued study in mathematics;
- to learn and view mathematics as a way of thinking about and interpreting the world around them; and to recognize that mathematics is a creative part of human culture in much the same way as music or fine art.

A. **Mathematical Processes:** Students will draw on a broad body of mathematical knowledge and apply a variety of mathematical skills and strategies, including reasoning, oral and written communication, and the use of appropriate technology, when solving mathematical, real-world and non-routine problems.

B. **Number Operations and Relationships:** Students will use numbers effectively for various purposes, such as counting, measuring, estimating, and problem-solving.

C. **Geometry:** Students will be able to use geometric concept, relationships and procedures to interpret, represent, and solve problems.

D. **Measurement:** Students will select and use appropriate tools and techniques to measure things to a specified degree of accuracy. They will use measurement in problem-solving situations.

E. **Statistics and Probability:** Students will use data collection and analysis, statistics and probability in problem-solving situations, employing technology where appropriate.

F. **Algebraic Relationships:** Students will discover, describe, and generalize simple and complex patterns and relationships. In the context of real world problem situations, the student will use algebraic techniques to define and describe the problem to determine and justify appropriate solutions.

III. **SCIENCE:** The Wisconsin science standards follow the format and content of the National Science Education Standards. Three of the content standards (D. Physical Science; E. Earth and Space Science; and F. Life and Environmental Science) address the knowledge-base of science, while the other content standards address the application of knowledge.

A. **Science Connections:** Students will understand that there are unifying themes: systems, order, organization, and interactions; evidence, models, and explanations; constancy, change, and measurement; evolution, equilibrium, and energy; form and function among scientific disciplines. These themes relate and interconnect the science standards to one another.

B. **Nature of Science:** Students will understand that science is ongoing and inventive, and that scientific understandings have changed over time as new evidence is found.

C. **Science Inquiry:** Students in Wisconsin will investigate questions using scientific methods and tools, revise their personal understanding to accommodate knowledge, and communicate these understandings to others.

D. **Physical Science:** Students in Wisconsin will demonstrate an understanding of the physical and chemical properties of matter, the forms and properties of energy, and the ways in which matter and energy interact.

E. **Earth and Space Science:** Students will demonstrate an understanding of the structure and systems of earth and other bodies in the universe and of their interactions.

F. **Life and Environmental Science:** Students will demonstrate an understanding of the characteristics and structures of living things, the processes of life, and how living things interact with one another and their environment.

G. **Technology Applications:** Students will demonstrate an understanding of the relationship between science and technology and the ways in which that relationship influences human activities.

H. **Science Applications:** Students will use scientific information and skills to make decisions about themselves, Wisconsin, and the world in which they live.

IV. SOCIAL STUDIES: "Social studies" is the title used to describe the study of the social sciences and humanities. Within the curriculum, social studies provides coordinated, systematic study of information, skills, and concepts from the disciplines of history, geography, political science, economics, anthropology, psychology, law, archeology, and sociology with attention given to connections among the peoples and nations of the world, the effect of science and technology on society (and vice versa), and the ways to practice good citizenship. Social studies helps young people develop the knowledge and skills necessary to make informed and reasoned decisions as citizens of a culturally diverse, democratic society in an interdependent world. Students at all levels should develop skills and understandings in all strands found in the Wisconsin standards for social studies. The organization of these standards allows the social studies curriculum to be developed as separate disciplines or in an integrated course.

A. **Geography – People, Places, and Environments:** Students will learn geography through the study of the relationships among people, places, and environments.

B. **History – Time, Continuity, and Change:** Students will learn about the history of Wisconsin, the United States, and the world, examining change and continuity over time in order to develop historical perspective, explain historical relationships, and analyze issues that affect the present and the future.

C. **Political Science and Citizenship – Power, Authority, Governance, and Responsibility:** Students will learn about political science and acquire the knowledge of political systems necessary for developing individual civic responsibility by studying the history and contemporary uses of power, authority, and governance.

D. **Economics – Production, Distribution, Exchange, Consumption:** Students will learn about production, distribution, exchange, and consumption so that they can make informed economic decisions.

E. **The Behavioral Sciences — Individuals, Institutions, and Society:** Students will learn about the behavioral sciences by exploring concepts from the discipline of sociology, the study of the interactions among individuals, groups, and institutions; the discipline of psychology, the study of factors that influence individual identity and learning; and the discipline of anthropology, the study of cultures in various times and settings.

BEST COPY AVAILABLE

Appendix Two

Academic Proficiency of Wisconsin Students

The ultimate measure of a school system is the academic proficiency of its students. While standardized test results are highly controversial, they remain one of the few quantifiable ways to get some measure of student performance.

The most highly regarded national tests are those of the National Assessment of Education Progress (NAEP), also known as "The Nation's Report Card." These tests, given to statistically meaningful samples of students, are conducted by the National Center for Education Statistics, a part of the U.S. Department of Education.

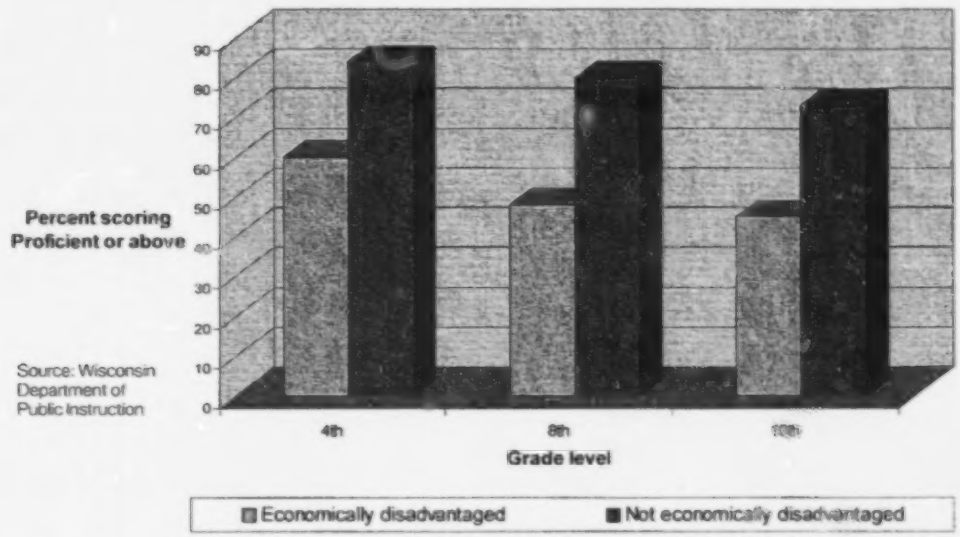
In Wisconsin, all districts must administer the statewide Knowledge and Concepts Examination (WKCE), part of the Wisconsin Student Assessment System. These tests are given to fourth, eighth, and tenth graders.

In both tests, the top three categories of grading are Basic, Proficient, and Advanced. The acknowledged goal is for all (or almost all) students to score Proficient or Advanced.

On the national NAEP tests, as shown in Chapter One, fewer than 40% of Wisconsin students scored Proficient or above. On many of the tests, fewer than one-third score that well.

On the state WKCE tests, fewer than two-thirds of Wisconsin's students score Proficient or above on most tests, as seen in the first chart below.

Achievement gap for poor students on the 2001 Reading tests



Source: Wisconsin Department of Public Instruction

By any standard, these performances are inadequate.

Achievement is considerably lower for students of color and students from low-income households. The second chart below shows the achievement gap for income levels, on the reading part of the WKCE tests. Similar gaps are found in the other tests.

BEST COPY AVAILABLE

Appendix Three

Defining a Thorough Education Infrastructure

(synopsis of the Wisconsin Educator Survey on Necessary School Resource Standards)

In 1998 the Institute for Wisconsin's Future (IWF) initiated a multi-organization effort to identify the resource infrastructure necessary to provide all Wisconsin students with a thorough education. As the initial step in examining funding adequacy as a policy option for Wisconsin, the consortium effort was designed to define the "goods and services" necessary to implement effective educational practices and ensure meaningful opportunity to all students. Utilizing school resource models developed in Wyoming, Minnesota and New Hampshire, IWF convened panels of education experts in December 1998. These panels included national experts, university specialists in curriculum, leaders of specialized education organizations, parents, school principals, teachers from diverse subject areas and district administrators based in urban, rural and suburban districts throughout Wisconsin. Using the Wisconsin Standards, best practice research, and specific areas of expertise, the panels identified essential instructional and operating system components of model school programs at the elementary, middle, and high school levels. Key components of the resource standards developed included teaching staff, curriculum, technology, equipment and materials, administration and special services.

Survey of Principals and Teachers

Following the December 1998 panel session, IWF and the Public Policy Forum conducted a survey of all of Wisconsin's public school principals and a random sample of its public school teachers. The purpose of the survey was to determine what staffing, technology, curricular and equipment resources educators viewed as necessary to meet Wisconsin's educational standards.

A survey questionnaire was developed jointly by staff from the Public Policy Forum and IWF regarding the classroom and school resources needed in a variety of areas. Specifically, the respondents were asked about:

- The maximum appropriate class size and the class and school sizes that produce the best results;
- The importance of different classroom technologies and equipment, and the school facilities needed, for a quality education;
- The number and type of staff required for programs to meet Wisconsin educational standards; and
- The resources necessary both for effective staff development programs and for monitoring the progress of individual students.

In addition, respondents were asked about the need for additional resources to assist students who are not acquiring necessary skills. Finally, the survey included a series of questions designed to gauge the respondents' support for an adequacy-based approach to school finance in general, and their views regarding the adequacy of school funding in Wisconsin in particular. This report presents an overview of the survey findings.

METHODOLOGY

The data for this study were obtained from questionnaires mailed to 1,953 public school principals and a probability sample of 4,618 public school teachers in Wisconsin. The listing of principals was obtained from the Association of Wisconsin School Administrators, and that organization provided a cover letter urging participation in the survey. The sample of teachers was drawn from the membership list of the Wisconsin Education Association Council, and that organization also provided a cover letter encouraging those selected to participate.

396 completed surveys were received from principals, and 767 surveys were returned by teachers. This amounts to an overall response rate of nearly 20 percent. This response rate is typical for mailed, self-administered survey questionnaires. It is reasonable to assume that those taking the time to complete a lengthy mailed questionnaire are a representative sample of the educators who are most interested in and informed about school resource and funding issues. The purpose of the survey was to assess the views of informed educators about the resources that schools need, and not to measure the actual resources currently available in Wisconsin public schools.

FINDINGS

Demographic Characteristics

The 1,163 individuals who responded to the survey are relatively well educated and have considerable teaching and administrative experience (See the demographic characteristics of the survey respondents summarized in Table 1). More than 80% of the teachers and nearly 88% of the principals are 40 years of age or older. The median number of years worked as either a teacher or principal is 20 years and 3 years, respectively. Virtually all of the principals and more than 65% of the teachers have a Master's or higher degree. The gender composition of the sample is in line with that of the larger population of educators.

One other background characteristic of the survey respondents should be noted. A large percentage of the respondents report that they work in a rural school district. Over 39% of the teachers and nearly 54% of the principals describe their districts as rural. The large number of respondents from rural areas is reflected in the low median enrollment of their schools. The assessments of some school resource needs may reflect the rural or small school background of many of the respondents.

Table 1: Respondents' Demographic and Occupational Characteristics

	Principals (n=396)	Teachers (n=767)
Sex		
Men	64.2%	26.3%
Women	35.8	73.7
Race		
White	98.0	96.3
Non-white	2.0	3.7
Age		
<30	.8	5.2
30-39	11.7	13.7
40-49	42.6	40.3
50-59	41.9	38.3
>60	3.0	2.5
Education		
Bachelor's Degree	.5	34.5
Master's Degree	80.8	63.9
Professional Degree	11.5	.7
Doctorate	7.2	.9
School Work In		
Elementary	46.4	42.2
Middle/Jr. High	18.5	19.5
High School	25.1	33.6
K-12 Combined	2.8	2.7
Other	7.2	2.0
School District		
K-12	87.0	88.8
K-8	4.3	2.8
9-12	3.1	3.2
Other	5.6	5.2
Location		
Urban	18.2	26.7
Suburban	27.9	34.2
Rural	53.9	39.1
Median Years Worked		
In District	3	13
As Principal / Teacher	4	20

BEST COPY AVAILABLE

Resource Standards

The survey questionnaire covered a wide range of resource issues, and the questions were grouped into distinct topics. For ease of presentation, the findings follow the organization of the survey and are summarized under several topic areas.

I. Class and School Size

Principals and teachers agreed that small classes and small schools were necessary for effective educational environments, views consistent with the research on smaller class and school size. Table 2 presents the median responses to questions about class and school size. When asked about the largest number of students that is appropriate for a typical class, the median number given by principals was 22 students at the elementary level and 25 students at the secondary level. The largest class size that teachers considered appropriate was somewhat smaller, ranging from 20 for elementary school to 22 for secondary school. When asked about the class size that produces the best results, the principals called for classes of 18 in elementary school and 20 in secondary school.

Table 2: Median Responses to Questions Regarding Class and School Size

Considering the goal of providing every student with the opportunity to learn, please indicate the...

	Principals			Teachers		
	Elem. (183)[a]	M.S. (73)	H.S. (99)	Elem. (332)	M.S. (152)	H.S. (256)
Greatest number of pupils appropriate for typical class	22	25	25	20	22	22
Number of pupils for each class that would produce the best results	18	20	20	16	19	18
Greatest number a teacher should be responsible for instructing	21	100	100	20	100	100
Approximate enrollment in your school today.	385	550	514	435	608	940
Number of students per school that would produce the best results	350	450	600	325	480	658

[a] Numbers in parentheses are base N's.

while the typical teacher placed the optimal class size at 16 for elementary school and at 18-19 for secondary school. When asked how many students a teacher should be responsible for instructing during a semester, the respondents indicated that teaching loads of 20 or 21 students at the elementary level and 100 students at the secondary level were appropriate. These class sizes and teaching loads are smaller and lighter than those found in many, if not most, Wisconsin schools. However, the judgments regarding appropriate and optimal class sizes were similar across urban, rural, and suburban districts and cannot be attributed to the fact that many respondents work in rural schools where class sizes tend to be smaller. The views of Wisconsin educators regarding the importance of smaller classes are consistent, regardless of the conditions prevailing in the schools in which they work.

There is less consistency in their views regarding school size. When asked about the number of students in a school that would produce the best results, the median responses of the principals ranged from 350 students at the elementary level to 600 for high school. The median responses of the teachers were very similar, varying between 325 for an elementary school and approximately 650 for a high school. However, these recommended school sizes varied across urban, suburban, and rural districts. The median figures presented in Table 2 may reflect the fact that a large percentage of respondents already worked in a relatively small school. Nonetheless, almost all of the respondents indicated that student achievement would be improved if Wisconsin's schools were smaller than those in which they currently work.

II. Classroom Equipment and Computer Technology

Respondents were asked to rate the importance of a variety of classroom resources. Teachers were asked to rate the importance of particular resources for their classes, which covered every grade and most subject areas, while principals were asked to make a more general assessment of the importance of each resource for the classes in their school. The overall similarity of the ratings shown in the top panel of Table 3 is quite striking.

Computer and Technology Needs

The classroom resource that was most likely to be rated as "very important" was computer access. Nearly 94 percent of the principals and more than three-quarters of the teachers consider computer access to be very important. The importance accorded to new instructional technologies is also reflected in the fact that 80 percent of the principals and nearly 55 percent of the teachers regard an Internet connection as very important for their classrooms. As we might expect given the importance attached to computer access, educators at all three levels see a need for multiple classroom computers or terminals. The desired number of students per computer varies from four at the elementary level to as low as two for secondary schools.

A majority of principals and teachers also consider it very important for their classes to have access to more established technologies such as overhead projectors, TVs, VCRs, calculators, test preparation materials, and a telephone. The one resource that a majority of both principals and teachers regard as "not important" is the availability of laptop computers for each student.

Table 3: Classroom Resources Needed

Median estimates of classroom resource needs:

Thinking of a class of 20 students (in your school/that you typically teach), please estimate the number or amount needed:

	Principals			Teachers		
	Elem.	M.S.	H.S.	Elem.	M.S.	H.S.
Desktop computers/terminals	5	10	10	5	10	6
Years you should use textbook before replacing	5	5	5	5	5	5
Total weekly hours of remedial work with reading specialist (number of students times hours per student)	20	15	5	10	10	5
Total weekly hours of remedial work with math specialist (number of students times hours per student)	12	15	6	8	5	0
Hours per week of assistance from teacher's aide	10	10	2	9	5	2
Classroom budget needed for supplies and materials	$500	$500	$200	$500	$500	$500

Textbooks and Supplies

The vast majority of educators, 79.4 percent of the principals and 76.7 percent of the teachers, regard a textbook as very important. However, both teachers and principals also consider non-textbook reading material as very important, and nearly as many consider printed instructional material to be very important. These similarities indicate the value placed upon different educational approaches and technologies. There was also general agreement that textbooks should be replaced every five years, and that elementary and middle school classrooms should be allowed to budget $500 for supplies and materials. High school principals, on average, argued for classroom budgets of $200.

BEST COPY AVAILABLE

Remedial Instruction

Teachers' decisions regarding the need for remedial reading and math teachers and teacher aides varied by grade level and subject area. However, a majority of principals consider it very important to have remedial teachers in the classrooms. Elementary and middle school educators see a greater need for classroom remedial work with reading and math specialists, and for teacher aides, than their high school counterparts. For example, elementary and middle school principals estimate that a class of 20 students needs 15 to 20 hours a week of remedial work in reading and 12 to 15 hours of remedial work in math. High school principals estimate the need for remedial work in each area at 5 to 6 hours.

III. Curriculum

The quality of the educational experience provided by any school depends largely upon its curriculum. Given the critical impact of curriculum options on school quality, principals and teachers were asked to judge the need for a number of different courses or subjects at the elementary, middle, and high school level, aside from the basic and required courses. The responses are remarkably consistent. Over 90 percent of the respondents in both groups agree on the need at the high school level for language arts electives, for classes in music performance (band, choir, etc.) and fine arts (painting, drawing, and sculpture), and for courses in industrial arts or vocational education. The near unanimity of the respondents in assessing the need for these courses testifies to the importance of offering students a variety of educational experiences. These findings are reported in Tables 5 and 6.

BEST COPY AVAILABLE

Table 4: High School Curriculum

Please indicate whether each of these classes is needed for a high/middle/elementary school to provide a quality education.

	Principals			Teachers		
	Needed	Not Needed	Not Sure	Needed	Not Needed	Not Sure
Language arts electives for 11th-12th grades.	93.3%	3.0%	3.7%	91.1%	1.8%	7.1%
3rd-4th year classes in one foreign language	83.6	7.6	8.8	85.5	7.4	7.1
3rd-4th year classes in two foreign languages	61.0	24.9	14.1	65.4	19.8	14.8
Music performance (band, choir)	93.1	3.0	3.9	94.0	2.6	3.4
Industrial arts / vocational education	93.1	3.6	3.3	95.1	1.5	3.4
Visual arts (film, photography)	74.0	12.0	14.0	78.1	8.8	13.1
Performing arts (e.g., theater, dance)	74.0	13.2	12.8	79.1	7.9	13.0
Fine arts (drawing, painting, sculpture)	91.6	5.1	3.3	93.1	2.2	4.7
Advanced placement science	88.6	6.9	4.5	88.0	6.0	6.0
AP social studies	80.5	11.1	8.4	82.2	9.5	8.3
AP English	86.8	8.1	5.1	87.2	7.1	5.7
AP math	89.5	6.3	4.2	89.0	5.5	5.5
AP foreign language	65.6	20.8	13.6	72.0	14.6	13.4
AP art	63.3	23.1	13.6	65.6	17.2	17.2

Although there was less certainty about the need for visual (film, photography, and graphic design) and performing (theater, drama) arts classes, nearly three-quarters of the principals and a slightly higher percentage of the teachers felt that these courses should also be part of the curriculum. In the view of these educators, a quality education cannot be defined solely in terms of core academic subjects.

Educators agreed that a quality education also offers students the opportunity to study a range of courses in depth. Over 80 percent of both groups agree upon the need for 3rd and 4th year classes in a foreign language and for advanced placement courses in the core subject areas of science, social

BEST COPY AVAILABLE

studies, English, and math. A smaller percentage, although still a majority, perceived a need for 3rd and 4th year classes in a second foreign language, or for advanced placement offerings in foreign language and art.

The assessments of the courses needed at middle and elementary schools also indicate the importance these educators attach to a well-rounded education. More than 90 percent of both groups feel that music performance and fine arts classes should be available in middle schools, and well over 80 percent call for classes in a foreign language and in industrial arts or vocational education. Much smaller majorities see a need for classes in two or more foreign languages and in visual and performing arts. Similarly, over 90 percent agree that elementary schools should offer classes in music, and over 80 percent feel that classes in the visual and fine arts are an essential part of the curriculum. A little over 60 percent feel that classes in a foreign language are needed, and approximately half think that elementary schools should make the performing arts part of the curriculum. On the other hand, over 80 percent of the respondents felt that industrial arts and vocational education are not needed at the elementary school level.

Table 5: Middle/Junior High and Elementary School Curriculum

Please indicate whether each of these classes is needed for a middle school/junior high and elementary school to provide a quality education.

	Principals			Teachers		
Middle School/Junior High	**Needed**	**Not Needed**	**Not Sure**	**Needed**	**Not Needed**	**Not Sure**
One foreign language	88.0	6.3	5.7	89.0	5.2	5.8
Two or more foreign languages	54.7	29.1	16.2	57.5	26.5	16.0
Music performance	95.7	2.0	2.3	96.2	1.1	2.7
Industrial arts/ vocational education	85.6	8.4	6.0	92.2	3.1	4.7
Visual arts	58.7	25.7	15.6	57.2	24.0	18.8
Performing arts	59.3	23.3	17.4	66.2	17.4	16.4
Fine arts	91.3	3.5	5.2	92.0	4.0	4.0
Elementary School						
Foreign language	61.6	19.2	19.2	62.3	23.9	13.8
Music classes	96.0	2.4	1.6	97.2	1.7	1.1
Industrial arts/ vocational education	18.4	61.4	20.3	30.1	48.5	21.4
Visual/Fine arts	85.5	9.8	4.7	87.1	8.5	4.4
Performing arts	47.2	37.6	15.2	54.2	28.0	17.8

IV. Staffing

Principals were asked to indicate the current number of full-time equivalent (FTE) positions that their school has in various personnel categories and the number of FTE positions that their school needs. Table 6 shows the median responses of elementary, middle, and high school principals to both sets of questions. Most of the differences between the current number of positions in various personnel categories

Table 6: Staff Needed to Meet Wisconsin Educational Standards

How many staff members does your school need in order to provide an education that meets Wisconsin's educational standards? Please indicate below the number of full-time equivalent positions your school currently has in each area and the number your school needs.

	Median Response of Principals					
	Current FTE Positions			FTE Positions Needed		
	Elem.	M.S.	H.S.	Elem.	M.S.	H.S.
Elementary school classroom teacher	15.0	—	—	17.0	—	—
Language arts	0.0	4.0	4.0	0.0	5.0	4.5
Math	0.0	4.0	4.0	0.0	4.0	4.0
Social studies/history	0.0	4.0	3.5	0.0	4.0	4.0
Science	0.0	4.0	3.5	0.0	4.0	4.0
Foreign language	0.0	1.7	2.0	0.0	2.0	2.0
Visual arts	0.5	1.0	1.0	1.0	1.0	1.5
Music	1.0	2.4	2.0	1.0	2.5	2.0
Theater/dance	0.0	0.0	0.0	0.0	0.0	0.0
Vocational education	0.0	1.0	3.8	0.0	1.2	4.0
Physical education/health	1.0	2.1	2.0	1.0	2.5	2.5
Remedial reading/math	1.0	0.0	0.0	1.0	1.0	1.0
Librarian/media personnel	1.0	1.0	1.0	1.0	1.0	1.0
Teacher aides	3.0	5.0	3.5	3.0	5.0	4.0
Special education teachers	3.0	5.0	3.5	3.0	5.0	4.0
Guidance counselors	0.6	2.0	2.0	1.0	2.0	2.0
Social workers/psychologist	0.5	0.6	1.0	1.0	1.0	1.0
Nurse	0.2	0.3	0.2	0.5	1.0	1.0
Administrators	1.0	2.0	2.0	1.0	2.0	3.0
Clerical personnel	1.5	3.0	3.0	2.0	3.0	4.0
Maintenance personnel	2.0	3.0	4.0	2.0	3.5	4.0
Total personnel	**31.3**	**44.8**	**45.5**	**36.5**	**49.7**	**53.5**

BEST COPY AVAILABLE

and the estimated number of positions needed are quite modest. The largest difference is between the current average of 15 classroom teachers in elementary schools and the 17 teachers that principals feel are needed to reduce class size and provide student with more individual attention. Other personnel needs at the elementary school level include a full-time art teacher, an additional teacher aide, and greater availability of student support personnel such as guidance counselors, social workers or psychologists, and nurses. In the estimate of these administrators, the typical elementary school needs a full-time counselor, a full-time position for a social worker or psychologist, and a nurse that is available half-time rather than one day a week. Although the perceived needs within each category are fairly modest, the overall difference between the number of personnel currently available and the number needed amounts to slightly more than five FTE positions.

The pattern of staffing needs at the secondary level is one of small increments in the number of FTE positions in a large number of personnel categories. Both middle and high school principals report a need for additional instructional staff in language arts, vocational education, physical education and health, for a full-time remedial reading and math teacher, and for additional teacher aides and greater access to nursing services. In addition, the median differences at the middle school level indicate a need for additional foreign language and music teachers, for a full-time social worker or psychologist, and for additional maintenance staff. At the high school level there is evidence of need for additional staff in social studies, science, visual arts and vocational education, as well as for additional clerical personnel. Measured in this way, the need for additional staff consists of small additions to a large number of personnel categories. But these small additions sum to a substantial difference between the total number of personnel needed and the number of positions currently available. The secondary school principals surveyed here, like their elementary school counterparts, report that their schools are understaffed. In the estimate of these administrators, there is a need for approximately five additional FTE positions at the typical middle school and for nearly eight additional FTE positions at the typical high school.

V. Staff Development

The survey included questions on both the time commitment and the personnel necessary for staff development. Teachers were asked to estimate both the number of hours they currently spend and the number of hours they need to spend each semester improving their technical skills, learning and implementing new curriculum, and coordinating their activities with other teachers.

The responses shown in Table 7 reveal that teachers spend, on average, a total of 28 hours a semester on staff development activities, and estimate that they need to spend 58 hours. In other words, these teachers currently spend about half the amount of time on staff development than they think is necessary. Effective staff development requires coordination and planning, as well as a substantial time commitment. Both principals and teachers were asked to rate the importance of having a staff

development coordinator in their school. More than 85 percent of the principals and over 77 percent of the teachers responded that it was "very" or "somewhat" important.

Table 7: Resources Needed for Staff Development

In addition to your regular classroom instruction, how much time do you spend, and how much time do you feel you need to spend, each semester on each of the following?

	Teachers Only	
	Median Hours Spend	Median Hours Need to Spend
Improving technical skills	8	18
Training in/implementing new curriculum	10	20
Planning/coordination with other teachers	10	20

How important is it to have a staff development coordinator in your school?

	Principals (N=385)	Teachers (N=741)
Very important	44.7%	33.2%
Somewhat important	41.8	44.0
Not very important	11.4	16.3
Not at all important	2.1	6.5

Unfortunately, a large majority of both principals and teachers report that their schools do not have an effective staff development program. As the figures in Table 8 show, more than 60 percent of each group responded negatively when asked if their schools devoted the time and resources needed for staff development. The most frequently given reason for their negative assessment was a "lack of time." More than half of the principals and nearly half of the teachers who responded negatively blamed time constraints for inadequate staff development. Since devoting staff time to any activity entails a financial cost, this suggests that most districts are not able or willing to adequately fund staff development programs. However, lack of time or funding was not the sole reason given for their

negative assessments. A substantial number of principals and teachers blamed the absence of staff development upon either a lack of commitment or poor organization. Teachers were more likely than principals to report a lack of commitment to staff development in their schools.

BEST COPY AVAILABLE

Table 8: Assessment of Current Staff Development

In general, do you feel that the school where you teach provides the time and resources needed for an effective and continuing program of staff development?

	Principals (N=388)		Teachers (N=741)	
	Yes	No	Yes	No
	39.9%	60.1%	38.7%	61.3%

Specific reasons given by those indicating that there is no effective staff development program.

	Principals (N=233)	Teachers (N=451)
Lack of time	143	212
Poorly organized	62	58
Lack of commitment	34	109
No worthwhile programs offered	17	6
Lack of personnel	13	21
Lack of money	8	5
Lack of equipment/materials	4	15

Appendix Four

Adequacy Model Development Participants

Consultant/Presenter

Jeff Browne	Research Director	Public Policy Forum	Milwaukee
John Myers	Consultant	Augenblick & Myers	Denver
Michael Rebell	Attorney at Law	Campaign for Fiscal Equity	New York
Richard Rothstein	Research Associate	Economic Policy Institute	Whittier
Emily Van Dunk	Research Coordinator	Public Policy Forum	Milwaukee

December 1998 Expert Panel

Barry Applewhite	Assistant Principal	North Division High School	Milwaukee
Stacey Basting	Curriculum Director	Eau Claire School District	Eau Claire
Bob Beglinger	President	WI Federation of Teachers	Chippewa Falls
Dick Best	Grade 6 Teacher	Glen Hills Middle School	Grafton
Ken Black	Manager-Financial Planning	Milwaukee Public Schools	Milwaukee
Bob Borch	Asst. Supt. of Finance & Operations	Elmbrook School District	Brookfield
Jo Anne Caldwell	Director of Teacher Education	Cardinal Stritch University	Milwaukee
Nancy Clark	Science Teacher	Monona Grove High School	Madison
Paulette Copeland	President	Milwaukee Teachers Education Association	Milwaukee
Beverly Cross	Associate Dean	UWM School of Education	Milwaukee
Cristina Diaz-Arntzen	Teacher	Rose Glen Elementary	Waukesha
Steven Dold	Deputy State Superintendent	Dept of Public Instruction	Madison
Winnie Doxsie	President, WI PTA	Wisconsin PTA	Appleton
Virgilyn Driscoll	Executive Director	WI Alliance for Arts & Education	Oconomowoc
Tim Duax	Principal	Atwater School	Shorewood
Laurie Friedrich	Staff Development Coordinator	Wauwatosa West HS	Wauwatosa
James Gibson	Consultant	Wisconsin Education Association Council	Brookfield
Brenda Harvey	Teacher	Hartford University School	Milwaukee
Sandy Johannsen-Brand	Principal	McKinley Middle School	Racine
Barb Keresty	Instructional Support Teacher	Glenn Stephens Elementary	Madison
Andrew Kuemmel	Mathematics Teacher	Edgerton High School	Brookfield

T. Kwiatkowski	Alternative Education Director	CESA -1	West Allis
Robert Larson	Principal	Brillion High School	Brillion
Jeff Leverich	Research Coordinator	Wisconsin Education Association Council	Madison
Darcy Luoma	Education Outreach Specialist	Institute for Wisconsin's Future	Madison
Jackie Muirhead	Spanish Teaching Assistant	UW-Milwaukee	Shorewood
Larry Nelson	Language Arts Teacher	Butler Middle School	Waukesha
Robert Nelson	Director of Technology	Milwaukee Public Schools	Milwaukee
Bob Peterson	Editor, 5th Grade Teacher	Rethinking Schools	Milwaukee
Robert Richardson	Dept. of Education	UW -La Crosse	La Crosse
Rochelle Robkin	President	WI Art Education Assoc.	Baraboo
Karen Royster	Executive Director	Institute for Wisconsin's Future	Milwaukee
Gale Ryczek	District Administrator	Bristol School District	Bristol
Glenn Schmidt	Special Education Teacher	Northside Elementary	Sun Prairie
Eileen Schwalbach	Professor of Education	Mount Mary College	Milwaukee
Ken Swenson	Washington High School	Milwaukee	
Jo Ann Truss	Principal	Whitefish Bay Middle School	Milwaukee
Steve Zemelman	Director	Center for City Schools	Evanston

May 1999 Expert Panel

Russ Allen	Research Director- IPD	Wisconsin Education Association Council	Madison
Patty Anderson	Treasurer /Region C Advisor	PTA	Cable
Lynell Anderson	Director- Bilingual Program	Wausau School District	Wausau
Barry Applewhite	Assistant Principal	North Division HS	Milwaukee
Stacey Basting	Curriculum Director	Eau Claire School District	Eau Claire
John Blankush	Principal	Central Junior High	Superior
Bob Borch	Asst. Supt. of Finance & Operations	Elmbrook School District	Brookfield
Bob Burke	Legislative Coordinator	Wisconsin Education Association Council	Madison
Jo Anne Caldwell	Director of Teacher Education	Cardinal Stritch University	Milwaukee
Donald Childs	District Administrator	Lake Mills School District	Lake Mills
Paulette Copeland	President	Milwaukee Teachers Education Association	Milwaukee
C. Diaz-Arntzen	Teacher	Rose Glen Elementary	Waukesha
Winnie Doxsie	President, WI PTA	Wisconsin PTA	Appleton
Tim Duax	Principal	Atwater School	Shorewood

Cynthia Ellwood	Principal	Hartford Avenue School	Milwaukee
John Fortier	Asst. Superintendent for Instructional Services	Dept. of Public Instruction	Madison
Laurie Friedrich	Staff Development Coordinator	Wauwatosa West HS	Wauwatosa
Steve Huth	Vocational Education Coordinator	Janesville School District	Janesville
S. Johannsen-Brand	Principal	McKinley Middle School	Racine
Barb Keresty	Instructional Support Teacher	Glenn Stephens Elementary	Madison
T. Kwiatkowski	Alternative Education Director	CESA -1	West Allis
Jeff Leverich	Research Coordinator	Wisconsin Education Association Council	Madison
Darcy Luoma	Education Outreach Specialist	Institute for Wisconsin's Future	Milwaukee
Jill Matarrese	Teacher	Hamilton High School	Brookfield
Janet Mathews	Associate Dean-Liberal Arts & Science	Milwaukee Area Technical College	Milwaukee
Julie Mead	Associate Professor	UWM-Dept. of Admin. Leadership	Milwaukee
Tom Moore	Research Coordinator	Institute for Wisconsin's Future	Milwaukee
Pablo Muirhead	Spanish Teacher	Shorewood Intermediate	Shorewood
Larry Nelson	Language Arts Teacher	Butler Middle School	Waukesha
Bob Peterson	Editor, 5th Grade Teacher	Rethinking Schools	Milwaukee
Scott Peterson	District Administrator	Wilmot UHS District	Wilmot
Joe Quick	Legislative Liaison	Madison School District	Madison
Robert Richardson	Dept. of Education	UW -La Crosse	La Crosse
Karen Royster	Executive Director	Institute for Wisconsin's Future	Milwaukee
Gale Ryczek	District Administrator	Bristol School District	Bristol
Glenn Schmidt	Special Education Teacher	Northside Elementary	Sun Prairie
Eileen Schwalbach	Professor of Education	Mount Mary College	Milwaukee
Jane Shibilski	President	Wisconsin PTA	Madison
David Wessel	Principal	Spencer High School	Spencer
Mary Ann Zapala	Principal	Riverside Univ. High School	Milwaukee

BEST COPY AVAILABLE

Appendix Five

Adequacy Models for Elementary, Middle, and High Schools

Wisconsin ELEMENTARY School Funding Adequacy Model, K-5

	Initial Expert Panel: *December 1998*	Educator Survey: *Median Response*	Final Expert Panel: *May 1999*
Class Size	15 in K-3rd grades, 20 in 4th-5th grades	17	15 in K-3rd grades; 20 in 4th-5th grades
School Size	350	320	345
Classroom materials, equipment & technology	Computer, laptop for each student, telephone, calculators, internet/e-mail, TV/VCR, overhead, non-textbook reading material	Computer, overhead, non-textbook reading material, printed instructional materials, $500 classroom budget, replace textbooks every 5 years.	Ration of one computer for every four students. Technology support personnel for maintenance and training.
School Resources/ Facilities	One computer lab per grade level, library, music room, art room, gym, cafeteria, technology suite, teacher resource room, community learning center, air conditioning	One computer lab, 66 total computers, science lab, library, art room	Capitol component not included.
Curriculum Options	Mandatory full-day K5, optional half-day K3 and K4, music visual/fine arts, performing arts,	Music, visual/fine arts	Mandatory full-day K5, optional half-day K3 and K4, music, visual/fine arts, foreign/ second language, curriculum coordinator
Support services for all students	Remedial reading/math resource teacher, ESL/bilingual staff when needed, guidance counselors, social worker	3 special education specialists (speech & language, OT, emotional, behavioral, learning disabled), remedial reading/math resource teacher, guidance counselor, social worker	3 remedial reading/math resource teachers, ESL/ bilingual staff when needed, guidance counsers, social worker
Staff Development	Staff development coordinator in school, intervention training	**	**

Wisconsin MIDDLE School Funding Adequacy Model, 6-8

	Initial Expert Panel: *December 1998*	Educator Survey: *Median Response*	Final Expert Panel: *May 1999*
Class Size	20	19	20
School Size	600	410	500
Classroom materials, equipment & technology	5 computers per classroom, laptop for each student, telephone, TV/VCR, overhead, test prep. materials, non-textbook reading materials, textbooks replaced every 5 years, technology replaced every 3 years	Computer access, telephone, overhead, $500 budget for classroom supplies, textbooks replaced every 5 years	Ration of one computer for every four students. Technology support personnel for maintenance and training.
School Resources/ Facilities	Science lab, foreign language lab, instructional kitchen, library, distance learning center, parent resource center, multi-media classrooms,	Computer lab, science lab, foreign language lab, instructional kitchens, libraries, art studio	Capitol improvements not included.
Curriculum Options	"	One foreign language, music performance (band, choir), fine arts (drawing, painting, sculpture), industrial arts/vocation ed.	Two or more foreign language teachers, music performance (band, choir), visual arts (film, photography), fine arts (drawing, painting, sculpture), performing arts (theater, dance), industrial arts/vocational ed.
Support services for all students	Remedial reading/math specialists, guidance counselors, social worker	Special education specialists, remedial reading/math specialists, guidance counselors	Special education specialists, remedial reading/math specialists, guidance counselors, social worker, school psychologist
Staff Development	Staff development coordinator	"	Release time needed, 1 hour/day

BEST COPY AVAILABLE

Wisconsin HIGH School Funding Adequacy Model, 9-12

	Initial Expert Panel: *December 1998*	Educator Survey: *Median Response*	Final Expert Panel: *May 1999*
Class Size	20	19	20
School Size	700	430	600-1000
Classroom materials, equipment & technology	5 computers per classroom, laptop for each teacher, telephone, Internet/e-mail, TV/VCR, overhead, $500 budget for classroom supplies, textbooks replaced every 5 years, technology replaced every 5 years	Computer access, $400 budget for classroom supplies, textbooks replaced every 5 years	Ration of one computer for every four students. Technology support personnel for maintenance and training.
School Resources/ Facilities	Foreign language lab, computer labs, media center, large library and subject area libraries, distance learning center	Computer labs, library	Capitol improvements not included.
Curriculum Options	4 yrs. English, technical reading & writing, speech, English electives in 11-12th, 2 foreign languages, 3 yrs. social studies, political science, geography, sociology, economics, psychology, history, science, math, arts	AP English, English electives in 11-12th grades, two foreign languages, 3rd & 4th years in one foreign language, AP social studies, biology, chemistry, physics, calculus, and statistics, visual arts, fine	2 foreign languages, 3rd & 4th years in 2 foreign languages, industrial arts/ vocational ed. arts, industrial arts/vocational ed.
Support services for all students	Occupational, physical, & speech therapist, guidance counselor, social worker, school psychologist	Special education specialists, remedial reading/math specialists, guidance counselor, social worker	Guidance counselors, social worker and school psychologist, .5 specialist for gifted students, .5 specialist for at-risk students
Staff Development	Staff development time needed for improving technical skills, training in implementing curriculum, planning/ coordinating with other staff, 20% work release & summer/extended hours for staff development activities	**	.5 staff development coordinator in school

Appendix Six

School Finance and Adequacy Resource Information on the Internet

The following web sites – all of them excellent – contain a wide range of material on Adequacy models, as well as many other school-finance issues. They also contain many links to other useful sites.

http://www.ncsl.org/programs/educ/NCEF.htm
Maintained by the National Center on Education Finance, part of the National Conference of State Legislatures. A comprehensive site.

http://www.accessednetwork.org/
Home page of ACCESS – Advocacy Center for Children's Educational Success with Standards. ACCESS is a part of the Campaign for Fiscal Equity, the group that brought a successful lawsuit against New York State's finance system. Excellent updates on state litigation.

http://nces.ed.gov/edfin/
Maintained by the National Center for Education Statistics, a part of the U.S. Department of Education. Another comprehensive site, with many links to data.

http://www.edweek.org/context/topics/issuespage.cfm?id=22
Education Week, the most authoritative news publication in K-12 education, maintains this site to focus on school finance.

http://www.wcer.wisc.edu/cpre/finance/
Home page for the school-finance group of the Consortium for Policy Research in Education, a loose affiliation among five of the nation's top research universities.

http://www.ed.sc.edu/drt/fiscalsig/
Home page of the Fiscal Issues, Policy, & Educational Finance group of the American Educational Research Association. Many links. Another professional organization is the American Education Finance Association, whose web site at http://www.aefa.org is due to be running again soon.

Bibliography

Abt Associates. 1993. *Prospects: The Congressionally Mandated Study of Educational Growth and Opportunity.* Washington, DC: U.S. Department of Education.

Anderson, J., D. Hollinger, and J. Conaty. 1992. "Poverty and Achievement: Re-examining the Relationship Between School Poverty and Student Achievement." Delivered at *Annual Meeting of the American Educational Research Association.*

Archer, Jeff. 1998. "Instruction, Technology Counts." *Teacher.*

Augenblick, John. 2001. "School Finance and Property Taxes: A Continuing, if Changing, Linkage." National Conference of State Legislatures - National Center on Education Finance.

Benson, John T. 2001. "Helping All Children Reach a Bright Future: 2001-2003 Biennial Budget Request." Wisconsin Department of Public Instruction, Madison, WI.

Bowie, Liz. 2001. "Revamping Secondary Education." *Baltimore Sun,* Oct. 9, 2001.

Campaign for Fiscal Equity. 2001. "Ensuring All Children the Opportunity for a Sound Basic Education: A Costing-Out Primer." Campaign for Fiscal Equity, New York, NY http://www.cfequity.org/cost-out.html.

Campbell County School District v. State of Wyoming. 2001. Supreme Court of Wyoming, 2001 WY 19. 00-120, 121, 122.

Clements, Douglas. 2001. "Young Children and Technology." *Educational Resources Information Center* Document ED416991.

Coley, Richard J. 1997. "Technology's Impact." *Electronic School.*

Cooper, H., B. Nye, K. Charlton, and S. Greathouse. 1996. "The Effects of Summer Schools: A Narrative and Meta-Analytic Review." *Review of Educational Research* 66:227-268.

Cotton, Kathleen 1996. "Affective and Social Benefits of Small-Scale Schooling." *ERIC Clearinghouse on Rural Education and Small Schools.*

Curtain, Helena. 1990. "Foreign Language Learning: An Early Start." *ERIC Clearinghouse on Languages and Linguistics.*

Darling-Hammond, Linda. 1997. "Teaching for High Standards: What Policymakers Need to Know and Be Able to Do." Delivered at *National Education Goals.* Washington, DC

Department of Public Instruction, Wisconsin. 2002. "Per Pupil Revenue and Cost Data." Department of Public Instruction, Madison, WI. http://www.dpi.state.wi.us/dpi/dfm/sfms/xls/cmprev01.xls.

Education Week. 2000. "Quality Counts." Jan. 13, 2000.

Ellis, Thomas I. 1984. "Class Size." *ERIC Clearinghouse on Educational Management.*

Finn, J. D. and C. M. Achilles. 1999. "Tennessee's Class Size Study: Findings, Implications, Misconceptions." *Educational Evaluation and Policy Analysis* 21:97-109.

Finn, J. D., S. B. Gerber, C.M. Achilles, and J. Boyd-Zaharias. 2001. "The Enduring Effects of Small Classes." *Teachers College Record* 103:145-183.

Foster, K. M. and C. K. Reeves. 1989. "FLES Improves Cognitive Skills." *FLES News.*

Gordon, Lawrence. 1974. "Patterns of Effective Inservice Education: A State of the Art Summary of Research on Materials and Procedures for Changing Teacher Behaviors in Inservice Education." Florida State Department of Education.

Guthrie, James and Richard Rothstein. 2001. "A New Millennium and a Likely New Era of Education Finance." in *Education Finance in the New Millennium: American Education Finance Association 2001 Yearbook,* edited by S. C. and W. J. Fowler. Larchmont, NY: Eye on Education.

Hadderman, Margaret. 1999. "Equity and Adequacy in Educational Finance." *Educational Resources Information Center* ERIC Digest 129.

Halstead, Dave. 1980. "Developing a Professional Growth Program in Small Schools." *NASSP Bulletin.*
Hamayan, E. 1986. "The Need for Foreign Language Competence in the United States." *ERIC Clearinghouse on Languages and Linguistics.*
Hansen, Janet S. 2001. "21st Century School Finance: How Is the Context Changing?" Education Commission of the States, Denver, CO.
Heath, S.B. and A. A. Roach. 1998. "The Arts in Non-school Hours." Carnegie Foundation for the Advancement of Teaching, Menlo Park, CA.
Howley, Craig and Robert Bickel. 1999. "The Mathew Report: National Report." Rural School and Community Trust.
Hruz, Thomas. 2000. "The Costs and Benefits of Smaller Classes in Wisconsin." Wisconsin Policy Research Institute, Thiensville, WI.
Ingersoll, Richard M. 1998. "The Problem of Out-of-Field Teaching." *Phi Delta Kappan.*
Institute for Wisconsin's Future. 2001. "Are School Revenue Limits Limiting Learning?" Institute for Wisconsin's Future, Milwaukee, WI.
Jencks, C. and S. Mayer. 1990. "Social Consequences of Growing Up in a Poor Neighborhood." In *Inner City Poverty in the U.S.*, edited by M. G. H. McGeary and L.E. Lynn. Washington, DC: National Academy Press.
Joyce, Bruce, and Beverly Showers. 1980. "Improving Inservice Training: The Messages of Research." *Educational Leadership.*
Kava, Russ and Layla Merrifield. 2001. "Elementary and Secondary School Aids." Wisconsin Legislative Fiscal Bureau, Madison, WI. http://www.legis.state.wi.us/lfb/informationalpapers/2001/27.pdf
Kennedy, M., R.K. Jung, and M.E. Orland. 1986. *Poverty, Achievement and the Distribution of Compensatory Education Services.* Washington, DC: U.S. Department of Education.
Kessler, Carolyn and Mary Ellen Quinn. 1980. "Bilingualism and Science Problem-Solving." Delivered at *Teachers of English to Speakers of Other Languages.* San Francisco, CA.
Krueger, A. B. and D. M. Whitmore. 2001. "Would Smaller Classes Help Close the Black-White Achievement Gap?" Princeton University Industrial Relations Section, Working Paper #451.
Landry, Richard G. 1974. "A Comparison of Second Language Learners and Monolinguals on Divergent Thinking Tasks at the Elementary School Level." *Modern Language Journal 58.*
Larson, Drew B., Faith Russell, and Ron Shanovich. 2002. "Alternative General Fund Revenue Sources (General Fund Taxes)." Wisconsin Legislative Fiscal Bureau, Madison, WI. Paper #1152.
Lee, Valerie E. and Julia B. Smith. 1996. "High School Size: Which Works Best, and for Whom." Delivered at *Annual Meeting, American Educational Research Association.* New York, NY.
Lippman, L., S. Burns, and E. McArthur. 1996. *Urban Schools: The Challenge of Location and Poverty.* Washington, DC: National Center for Education Statistics.
McGill-Franzen, Anne and Richard Allington. 2001. "Lost Summers : For Some Children, Few Books and Few Opportunities to Read." *Classroom Leadership* 4.
Mead Jr., Robert G. 1983. "Foreign Languages: Key Link in the Chain of Learning." Delivered at *Northeast Conference on the Teaching of Foreign Languages.*
Molnar, Alex, P. Smith, and J. Zahorik. 1999. "1998-99 Evaluation Results of the Student Achievement Guarantee in Education (SAGE) Program." University of Wisconsin-Milwaukee, School of Education
Molnar, Alex, P. Smith, J. Zahorik, A. Palmer, A. Halbach, and K. Ehrle. 1999. "Evaluating the SAGE Program: A Pilot Program in Targeted Pupil-Teacher Reduction in Wisconsin." *Educational Evaluation and Policy Analysis* 21:165-177.
Molnar, Alex, P. Smith, J. Zahorik, K. Ehrle, A. Halbach, and B. Kuehl. 2000. "1999-00 Evaluation Results of the Student Achievement Guarantee in Education (SAGE) program." University of Wisconsin-Milwaukee, School of Education.

Molnar, Alex, P. Smith, J. Zahorik, A. Palmer, A. Halbach, and K. Ehrle. 2000. "Wisconsin's Student Achievement Guarantee in Education (SAGE) Class-Size Reduction Program: Achievement Effects, Teaching and Classroom Implications." In *How Small Classes Help Teachers Do Their Best*, edited by M. C. Wang and J. D. Finn: Temple University Center for Research in Human Development and Education

Murnane, R. J. 1975. *The Impact of School Resources on the Learning of Children*. Cambridge, MA: Ballinger Publishing Co.

NAEP. 2002. "National Assessment of Educational Progress." National Center for Education Statistics, Washington, DC http://nces.ed.gov/nationsreportcard/.

Nathan, Joe and Karen Febey. 2001. "Smaller, Safer, Saner, Successful Schools." Center for School Change, Humphrey Institute of the University of Minnesota, Minneapolis, MN.

National Association for the Education of Young Children. 1996. "Technology and Young Children — Ages 3 through 8." National Association for the Education of Young Children.

National Center for Education Statistics. 2001. "Public School Finance Programs of the United States and Canada: 1998-99." U.S. Department of Education, Office of Educational Research and Improvement. CD-ROM. NCES 2001-309.

National Commission on Teaching and America's Future. 1996. "What Matters Most: Teaching for America's Future." National Commission on Teaching and America's Future, New York, NY.

National Conference of State Legislators. 1998. "Education Adequacy: Building an Adequate School Finance System." National Conference of State Legislators, Denver, CO.

Nelson, F. Howard, Rachel Drown, and Jewell C. Gould. 2001. "Survey & Analysis of Teacher Salary Trends 2000." American Federation of Teachers, AFL-CIO, Washington, DC http://www.aft.org/research/survey00/salarysurvey00.pdf.

Odden, Allan. 2000. "An Adequacy Approach to Wisconsin School Finance." Delivered at *Governor's Blue-Ribbon Commission on State-Local Partnerships for the 21st Century*. Madison, WI.

Odden, Allan. 2001. "The New School Finance." *Phi Delta Kappan* 83.

Pelavin, S.H. and M. Kane. 1990. *Changing the Odds: Factors Increasing Access to College*. New York, NY: College Entrance Examination Board.

Picus, Lawrence O. 2000. "Adequate Funding." in *About School Spending:* American School Board Journal.

President's Commission on the Arts and Humanities. 1996. "Eloquent Evidence: Arts at the Core of Learning." National Endowment for the Arts, Washington, DC

Quintanilla, Ray. 2001. "Schools Thinking Small." *Chicago Tribune*, Aug. 31, 2001.

Rebell, Michael A. 1999. "Studies in Judicial Remedies and Public Engagement: Education Adequacy Litigation and The Quest For Equal Educational Opportunity." Campaign for Fiscal Equity, New York, NY

Rebell, Michael A 2001. "Education Adequacy, Democracy and the Courts." *National Academy of Sciences and National Research Council.*

Reschovsky, Andrew and Jennifer Imazeki. 2001. "Achieving Educational Adequacy through School Finance Reform." *Journal of Education Finance* 26:373-396.

Riley, Richard. 1999. "Schools as Centers of Community." Delivered at Annual meeting, *American Institute of Architects*. Washington, DC

Robinson, G. E. 1990. "Synthesis of Research on the Effects of Class Size." *Educational Leadership* 47:80-90.

Rural Trust. 2000. "Busing Hearings in West Virginia: Citizens Tell their Tales." *Rural Policy Matters Newsletter.*

Sanders, W.L. and J.C. Rivers. 1998. "Cumulative and Residual Effects of Teachers on Future Student Academic Achievement." in *Thinking K-16: Good Teaching Matters: How Well Qualified Teachers Can Close the Gap:* Education Trust.

Schulhofer-Wohl, Sam, and Amy Rinard. 2001. "School Funding System Bears Weight of Well-intentioned Reforms." *Milwaukee Journal Sentinel*, Oct. 20, 2001.

Seaburn, Bonnie and Robert E. Sudlow. 1987. "Staff Development Implications of Effective Schools Project." *ERIC Document ED279097.*

Slavin, R.E., N. Karweit, and B. Wasik. 1991. "Preventing Early School Failure: What Works?" Center for Research on Effective Schooling for Disadvantaged Students, Baltimore, MD.

Stanton-Salazar, R.D., and S.M. Dornbusch. 1995. "Social Capital and the Reproduction of Inequality: Information Networks among Mexican-Origin High School Students." *Sociology of Education* 68:116-135.

Stiefel, Leanna, Patrice Iatarola, Norm Fruchter, and Robert Berne. 1998. "The Effects of Size of Student Body on School Costs and Performance in New York City High Schools." New York University, NY Institute for Education and Social Policy.

Talis, Annette 2001. "The Politics of Revenue Caps." *Wisconsin School News*, May 2001.

U.S. Census Bureau. "American Fact Finder, Wisconsin Social Characteristics, 1990 and 2000."

U.S. Department of Education. 2000. *The Class-Size Reduction Program: Boosting Student Achievement in Schools Across the Nation — A First-Year Report:* U.S. Department of Education.

Vincent v. Voight. 2000. Supreme Court of Wisconsin. 2000 WI 93. 97-3174

Walberg, Herbert and William Fowler. 1997. "Expenditure and Size Efficiencies of Public School Districts." *Educational Researcher.*

Wasik, B.A. and R.E. Slaving. 1993. "Preventing Early Reading Failure with One-to-One Tutoring: A Review of Five Programs." *Reading Research Quarterly* 28:178-200.

Wasley, Patricia, Michelle Fine, Matt Gladden, Nicole E. Holland, Sherry P. King, Esther Mosak, Linda C. Powell. 2001. "Small Schools: Great Strides. A Study of New Small Schools in Chicago." Bank Street College of Education, New York, NY

Weathersby, Jeanie and Steve Harkreader. 1999. "Staff Development and Student Achievement: Making the Connection." Delivered at *Annual Meeting of the American Educational Research Association*. Montreal, Quebec.

Wenglinsky, Harold. 1998. "Does It Compute? The Relationship between Educational Technology and Student Achievement in Mathematics." Educational Testing Service, New Jersey.

Wilson, Brent G. 1993. "Evaluating the Impact of Technology at Parkview Elementary School: The Full Report." ERIC.

Wisconsin Manufacturers & Commerce. 2001. "Low Spending Districts Dominate Student Test Scores." Wisconsin Manufacturers & Commerce, Madison, WI.

Witte, John. 1999. "Cost Benefit Issues and Implications of Reducing Class Size in Public Schools." North Central Regional Educational Laboratory, Oak Brook, IL.

U.S. Department of Education
Office of Educational Research and Improvement (OERI)
National Library of Education (NLE)
Educational Resources Information Center (ERIC)

REPRODUCTION RELEASE

(Specific Document)

I. DOCUMENT IDENTIFICATION:

Title: Funding Our Future: An Adequacy Model for Wisconsin School Finance

Author(s): Jack Norman

Corporate Source: Institute for Wisconsin's Future

Publication Date: June 2002

II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, *Resources in Education* (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic media, and sold through the ERIC Document Reproduction Service (EDRS). Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following three options and sign at the bottom of the page.

The sample sticker shown below will be affixed to all Level 1 documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

Sample

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

1

Level 1

☑

Check here for Level 1 release, permitting reproduction and dissemination in microfiche or other ERIC archival media (e.g., electronic) and paper copy.

The sample sticker shown below will be affixed to all Level 2A documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE, AND IN ELECTRONIC MEDIA FOR ERIC COLLECTION SUBSCRIBERS ONLY, HAS BEEN GRANTED BY

Sample

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

2A

Level 2A

☐

Check here for Level 2A release, permitting reproduction and dissemination in microfiche and in electronic media for ERIC archival collection subscribers only

The sample sticker shown below will be affixed to all Level 2B documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY

Sample

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

2B

Level 2B

☐

Check here for Level 2B release, permitting reproduction and dissemination in microfiche only

Documents will be processed as indicated provided reproduction quality permits.
If permission to reproduce is granted, but no box is checked, documents will be processed at Level 1.

I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche or electronic media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries.

Sign here, → please

Signature: Jack Norman	Printed Name/Position/Title: JACK NORMAN RESEARCH DIRECTOR
Organization/Address: Institute for Wisconsin's Future 1717 S. 12th St., Suite # 203 Milwaukee WI 53204	Telephone: 414-384-9094 FAX: 414-384-9098
	E-Mail Address: jnorman@wisconsinsfuture.org Date: 7/26/02

(over)

III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):

If permission to reproduce is not granted to ERIC, *or*, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available through EDRS.)

Publisher/Distributor:
Address:
Price:

IV. REFERRAL OF ERIC TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER:

If the right to grant this reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

Name:
Address:

V. WHERE TO SEND THIS FORM:

Send this form to the following ERIC Clearinghouse:

ERIC Clearinghouse on Urban Education
Box 40, Teachers College
Columbia University
525 West 120th Street
New York, NY 10027

T: 212-678-3433 /800-601-4868
F: 212-678-4012

http://eric-web.tc.columbia.edu

However, if solicited by the ERIC Facility, or if making an unsolicited contribution to ERIC, return this form (and the document being contributed) to:

ERIC Processing and Reference Facility
4483-A Forbes Boulevard
Lanham, Maryland 20706

Telephone: 301-552-4200
Toll Free: 800-799-3742
FAX: 301-552-4700
e-mail: info@ericfac.piccard.csc.com
WWW: http://ericfacility.org

EFF-088 (Rev. 2/2000)